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ORIGINAL COMMUNICATIONS.

ON TUMORS IN GENERAL AND HARD FIBROUS TUMORS.

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(Read to the Chicago Medical Society.)

I.—*Origin of Tumors. Theory of development and growth.*

A.—The elementary textures are of the same kind and produced in the same way as they are in normal tissues, external, fatty, glandular and vascular tumors.

B.—The blood furnishes a blastema in which cells are developed, and which undergo the same metamorphosis observed in the development of similar textures in the embryo, as in fibrous and osseous tumors.

C.—By multiplication of cells, which either already exist or are formed, and by their numbers and mode of arrangement alter the normal relations of the textures, as in epithelial, cartilaginous and cancerous growths.

D.—One or more of these modes of development and growth may be combined, and thus we get fibro-cartilaginous growths, etc.

It has been asserted that tumors have their origin from extravasated blood or *inflammatory* exudation becoming organized, but this is probably incorrect.

1st.—Because when these materials organize, they gradually *decrease*, and become more like the surrounding parts, whilst tumors gradually *increase*, and pursue a development and growth peculiar to them. In the inflammatory exudation there

is a continuous tendency *towards conformity* with the type of the body; in tumors a *direct and continuous deviation* from it in shape and volume, if not in texture.

2d.—A tumor may be like the natural tissues of the body, but as a growing substance it is unlike them, because it grows out of proportion to the rest, and apparently with inherent power and with no seeming purpose.

3d.—Even when a tumor has attained its full growth, excepting in the rare case where a tumor is absorbed, there is no indication of a return to the normal type or condition of the body, we find no improvement as in the case of organized lymph, exuded in inflammation, nor adaptation to purpose; no assumption of a more natural shape, but has rather a tendency to degenerate. From these premises we demonstrate the nearly independent nature of their growth and cessation, and whilst forming part of the bodily organism and borrowing from it the materials to nourish them, tumors grow, maintain themselves or degenerate, by virtue of forces inherent in themselves.

II.—*Elementary Structure of Tumors.*

1st.—Molecules and Granules.

2d.—Nuclei.

3d.—Cells.

4th.—Fibres.

5th.—Tubes (particularly Vascular ones.)

6th.—Crystals, or irregular masses of mineral matter.

These elements, though severally combined in tumors, do not serve specially to characterize any particular one, for the reason that tumors very unlike each other in their external characters and natures, may be composed of the same elements; external, cystic, glandular, cartilaginous and cancerous growths, are all fibro-cellular.

III.—*Formation of Fibrous Growths.* Two kinds.

1st.—By an exudation in which new fibres are formed.

2d.—By hypertrophy of fibrous tissue already existing, by their division or enlargement, external hypertrophy of voluntary and involuntary muscular fibres.

The first form presents us with several varieties:

A.—*Molecular Fibres.* By the coagulation of the exudation

in which the molecules arrange themselves in a linear manner, as in buffy coat of a coagulum.

B.—*Nuclear Fibres.* By nuclei being formed in exudation, which elongate and shew a tendency to fibrillate.

C.—*Cell Fibres.* By cells being formed which become fusiform, split up, and form fibres, as in formation of healthy tissues.

In these three ways we get all varieties and forms of fibrous element, from the most delicate areolar tissue to structures as dense as ligament or fibro-cartilage.

IV.—*Pathological Fibrous Tissue is met with:*

1st.—In form of cicatrix.

2d.—In white patches on pericardium, pleura, and peritoneum, the consequence of chronic exudation on serous membranes.

3d.—Thickening after sub-cutaneous section of tendons.

4th.—Indurations and thickening of skin, cirrhosis of liver, lung and kidney from an increase of the areolar tissue.

5th. Tumors which are divisible into

A.—Sarcomatous or *soft* fibrous tumors.

B.—Dermoid or *hard* fibrous tumors.

C.—Neuromatous fibrous tumors.

V.—*General character of Dermoid or hard Fibrous Tumors.**

They have been called dermoid from their resemblance to dermis, and if we take the dermis of some large mammal, as the whale, the analogy of structure is very evident. Their color is generally white, but sometimes inclining to yellow; tough, heavy, and of considerable density, which varies from that of a tendon to that of ligament and fibro-cartilage. To the touch fibrous tumors are usually very firm, often extremely so, they may even be as hard and incompressible as hard cancers; if they are soft or fleshy, or succulent, it is from œdema or inflammatory softness, or infiltration of their substance. Fibrous tumors seem to grow in a spherical or oval

* Dr. Baillie described fibrous tumors, or fibrous bodies, as "hard fleshy tubercle" of uterus. Cruveilhier calls them "productions fibreuses parasitaires." The older pathologists called them "schirrus," with which they were confounded. Wm. Hunter was the first to point out their true nature, and to separate them from the classification of tubercular and schirrous tumors. But it is principally at the commencement of the present century that their true nature has been studied and ably commented upon by Dupuytren, Laennec, Cruveilhier and Andral.

shape, the surface being smooth or superficially lobed, but we find them differ occasionally from the type when they mutually press on one another, or are pressed upon by surrounding parts. When a fibrous tumor is pendulous, the lowest part grows most, or is most swollen, and thus it assumes a pyriform shape rather than a spheroidal, but retains its smooth surface; when it grows into a cavity it is apt to assume the shape of that cavity, or else becomes deeply lobed. They are so elastic, that when cut their surfaces rise in convexities like those of the intervertebral substance, presenting numerous white glistening fibres, intimately interwoven together. The bundles of fibres are often arranged in concentric circles around many centres, so that in the section we have a vague imitation of the aspect of the intervertebral substance. On making a section of this large fibrous tumor of the uterus, a number of these concentric masses are found to exist, and the fibres are seen coursing and curling in all directions, but more or less disposed to include certain definite spaces within them, so that we see several small round circumscribed tumors imbedded in the walls of the uterus, many of them being coated with a layer of calcareous matter. Now, as these grow, they project from the surface, and then slowly enlarge within the cavity of abdomen. Very often a bunch of them grows from the surface, as seen in the specimen under consideration, forming a mass of distinct tumors. Occasionally they become pedunculated, and some of them may here be seen hanging by a slender cord to the fundus, and they are occasionally found loose in the abdomen from rupture of the pedicle. They are not very vascular, though there is some difference in this respect, some approaching the pinkish hue and softness of sarcomatous growths; others, like this tumor, being of a dead white; of extreme density, and but few vessels. They become more softened and vascular during pregnancy, assuming a bluish-red color, but as soon as the uterus returns to its natural shape, the morbid growth also resumes its ordinary character. We may state generally that fibrous tumors are modified in their character and structure towards an imitation of the tissues in or near which they are severally placed.

From the all pervading character of fibrous and connective tissue, it will not be a matter of surprise to find that these tumors are of most frequent occurrence in every part, but by far their most common seat is the uterus; again, that of all the abnormal formations which occur in the uterus, fibrous tumors are the most common. According to Bayle's calculations, they are found in twenty per cent. of the women who die after 35 years of age. Fibrous tumors may occur near, as well as in the uterus; in those parts in which smooth muscular tissue, like that of the uterus is found to extend, viz: Utero-rectal, and utero-vesical folds and the broad ligaments.

The uterus consists of muscular fibre, but which is scarcely distinguishable by an unpractised eye from simple fibrous tissue in the unimpregnated state, and the tumors which grow within it are composed of the same elements, (i. e. smooth or organic muscular fibres are more or less abundant, like as in the uterus itself.) It is, however, when the organ is rapidly growing in size, during pregnancy, that new well formed muscular fibres become developed, and then it is that a tumor, if one be present, also increases, in accordance with the activity of the nutrition of the uterus, the muscular nature of the tumor becomes apparent, and in consequence of this, the name '*muscular tumor*' has been substituted by Vogel for that of fibrous. We cannot say that they are strictly muscular tumors, but the *mingling* of muscular fibres, in imitation of the tissue of the uterus, is constant in these tumors. It is observed that when tumors are developed in the substance of the organ, its muscular fibres become hypertrophied as in pregnancy; its blood vessels enlarged, and venous sinuses may, as in the condition of pregnancy, give rise to the 'bruit de souffle.' (Preparations 375 to 377. M. D.) Very generally we find elastic fibres intermingled with the more abundant fibrous tissue.

Fibrous tumors growing in solid organs have usually a complete fibro-cellular capsule, and in the uterine walls it is peculiarly dry and loose, so that when we cut on the tumor it almost of itself escapes from its cavity. The number of these tumors varies, rarely unique, more commonly mutiple and isolated. M. Huguier has given a case in which these mutiple tumors

were enclosed by one common enveloping membrane, constituted by a layer of hypertrophied areolar tissue. Their volume varies from a grain of flax seed to an adult head, and even larger. Their growth is through nucleated blastema. Growth generally slow and painless, so slow that tumors of thirty or more years existence are found still far short of the enormous dimensions which they ordinarily attain.

No general rule can be given, especially as the rate of growth is influenced by the resistance afforded by the more or less yielding parts around. The extent of growth seems unlimited; amongst fibrous tumors are found the heaviest yet known, 50, 60, and 70 lbs. Walter wrote his essay on a tumor which weighed 71 lbs., and refers to one which weighed 74 lbs. My friend Dr. Francis, of New York, described one in the *American Journal of Medical Sciences*, over 100 lbs. Cancer cells are never found in them; in cases in which they were said to have existed, it was *merely the fibrous tissue around the cancer which was hypertrophied*, and evidently was not a tumor in a degenerate condition. Occasionally, after extirpation, they have been found to recur and pursue *a course like cancer*, growing in internal organs, with a tendency to sloughing or ulceration, involving adjacent structures. (*Vide* cases reported by Paget and Syme.) Hence they have been termed 'malignant fibrous tumors;' but the question of real malignancy of structure is *doubtful*, inasmuch as they are identical in all respects of structure and chemical composition with the fibrous tumors of the uterus, excepting their muscular fibres.. The probable fact is, that in such cases the surgeon really leaves multitudes of germs behind, infiltrated among muscles and neighboring parts, which may be detected there by the microscope, although invisible to the naked eye, and thus continue to propagate the disease. The principal character by which fibrous tumors differ from those of cancer, is, that on scraping them, *no milky juice* is exuded. The firmness of these tumors, or hardness when cut with a knife, is sufficient to characterize them, and especially if there be any gritty or earthy matter within them, which never occurs in softer or cancerous growths. When they approach the skin they may ulcerate, and have

sometimes been mistaken for a cancerous degeneration. In order to prevent confusion in the classification, I prefer to call them uterine fibrous tumors, which grow internally, under the name of '*internal and pedunculated fibrous tumors.*' They are continuous out-growths of and from the substance of the uterus, the membranous, muscular and fibrous tissues of the uterus, growing in various proportions into its cavity and that of the vagina. The fibrous tumor polypus, is sometimes called '*muscular polypus,*' from the great development of muscular fibres, which would appear to be an effort of nature to rid itself of these tumors by expelling them from the cavity.

VI.—*Special characters, etc., of hard Uterine Fibrous Tumors.*

1st.—*Their seat is different* from the soft polypi, as well as the structure. The hard fibrous polypi are nearly always attached to the *fundus*, or on one of the walls of uterus (well shewn in specimens Nos. 366, 368, 369 Musee Dupuytren); whilst the soft polypi are situated in the *neck* or its immediate neighborhood; and which are nothing more than an hypertrophied condition of the mucous and glandular structures of this region.

M. Huguier has given a remarkable exceptional case of a fibrous tumor of the neck of the uterus, which had caused an elongation of its posterior lip.

2d.—*The disposition of the fibres* is different from the soft polypi; in the hard polypi the fibrous tissue is in *hard concentric layers*; on the contrary, in the *soft* the fibrous tissue *radiates*, and the bundles of fibres are separated by cavities which enclose ordinarily a clear viscid fluid, hence these have been called '*gelatinous polypi.*'—Preparations from 356 to 360 M. D.

3d.—The whole wall of the uterus may be crammed with fibrous tumors, whilst others project from it into the peritoneal cavity. It has been observed that when a fibrous tumor fills the cavity of the uterus, or projects from it into the vagina, it is not usual for another to be found in its walls. They do occur, but comparatively rare. It is yet much rarer for fibrous tumors to occur in any other part, when they do exist in the uterus. One *apparently exceptional case* is recorded by Dr. Sutherland, where a fibrous tumor was found in the groin of a

lunatic 42 years old, *but if it were connected with the round ligament*, it might be an *example* of the rule.

4th.—Fibrous tumors may occupy all parts of the uterus, but their seat of predilection is in the following order: first, walls of uterus, principally posterior; second, Fundus; third, anterior wall of neck.

5th.—When the tumor is developed from *the mucous surface* of uterus (sub-mucous tissue) it soon becomes pedunculated, distends the cavity, and may attain such development as to simulate pregnancy, the neck and os dilate, and it may protrude into the vagina, simulating pregnancy arrived at its last stage.

6th.—When the pedicle is attached to fundus, it may turn the uterus inside out. (*Vide* preparation No. 377 Musee Dupuytren.) Such an accident would render it difficult in the operation of extirpation of the tumor to distinguish between the fibrous tumor and the wall of the uterus; and it is important not to mistake for the pedicle the invaginated portion of the uterus, because if cut the uterus *would then communicate with he peritoneal cavity.*

7th.—When this pedunculated tumor is developed from the sub-peritoneal tissue of the uterus, the volume which it acquires may be considerable, and it may distend the abdominal cavity by rising out of the pelvis, the uterus being much lengthened by being drawn upon by the pedicle, and the neck, as in the case of pregnancy, would be found higher.

8th.—According to Rokitansky the appearance of these tumors is never before the 30th year, and most frequently after the 40th.

9th.—Whilst fibrous tumors are most frequently generated from the fundus, carcinomatous disease is developed from the inferior segment of the uterus.

10th.—Those tumors which are embedded in the walls of the uterus appear to be encysted, being limited by an enveloping fibrous membrane, a sort of cyst. These tumors are but little vascular, we scarcely ever meet with vessels but on their surface in the cellular tissue, rarely do we see them penetrate into the centre of the tumor, if two or three fibrous tumors are united together by cellular tissue, we find vessels in the con-

nective tissue. For these reasons the tumors themselves cannot readily inflame, but their enveloping fibrous membrane, which is very vascular, may become the seat of inflammation, which if it has been intense and existed some time may render the tumor more or less deeply red and soft.

11th.—One thing very remarkable is that these fibrous tumors, when they lie free in the abdominal cavity by rupture of the pedicle, they may remain a long time without undergoing any alteration, although they are exposed to putrefactive agencies, (i. e. Heat and moisture.) Some authors have supposed this absence of putrefaction to be due principally to the absence of the contact of air, and the slight vascularity of these tumors, and under this condition presenting an analogy to foreign bodies in the joints. We may consider heat as necessary to their life, at the same time they are surrounded by serous exhalations. It is possible that the heat favors their imbibition of these liquids, which may be a mode of vitality for them up to a certain point, but it is more probable that they undergo calcareous degeneration. Some doubt still exists amongst pathologists as to the existence of these tumors lying free in the abdominal cavity.

Degeneration of fibrous tumors are of three kinds: Calcification, cysts and softening or disintegration, thus giving rise to the terms Fibro-cystic and Fibro-calcareous tumors.

1st.—Calcareous matter is found to exist in these tumors in two forms, either coating them with a thin layer of chalky substance, or deposited abundantly throughout the tumor so that it forms a hard mass. If it grows inwards, the cavity of the uterus may be occupied by such a mass. The structure is amorphous, possessing none of the characters of true bone, and for this reason it cannot be supposed to be an exostosis, as was thought from a specimen found in a churchyard. An oval, coral-like mass, five inches long, was sent to J. Hunter, as a urinary calculus; on analysis it was found to contain 18½ per cent. of animal matter, consisting of gelatine, with a small proportion of albumen, and its other chief constituents were phosphate and carbonate of lime, the carbonate being greater than in human bone. Such masses consist of an amorphous and

disorderly deposit of salts of lime and other bases in combination with fibrous tissue; and not true osseous tissue, which is rarely formed in fibrous tumors of the uterus. Though the degeneration of fibrous tumors into bone is denied by most pathologists, yet a specimen which I examined, taken from a subject in the Ecole Partique of Paris, there was a large osseous tumor of the uterus of several pounds weight. It was examined microscopically by M. Martin Magron and M. Robin, and was presented to the Societe Anatomique de Paris. Lebert (Physiologie pathologique, 1842, Tome 2me atlas fig. 22) states that on two occasions he has seen true bone produced in these tumors. Wedl has figured true bone in the interior of these growths. This process of calcification is important as being a manifestation of a loss of formative power in the tumor. When in this state they never grow, and are as inactive as the calcified arteries of old age.

2d—The formation of cysts is not unfrequent in fibrous tumors, especially when the textures are more than usually loose. It may be caused by a local softening and liquefaction of a part of the tumor, with effusion of fluid in the affected part, or to an accumulation of fluid in the interspaces of the intersecting bands, and these are the probable modes of formation of the roughly bounded cavities that may be found in uterine tumors. But in others, of small size, and highly smooth polished internal surfaces, it probably depends on a process of cyst formation, corresponding with that traced in cystic disease of breast and testes. They contain a serous or gelatinous fluid.

3rd.—Softening or disintegration is usually the result of inflammation of the hypertrophied sub-mucous or sub-peritoneal areolar tissue enveloping these tumors, and affecting their nutrition.

Complications arising from Uterine Fibrous Tumors.

A.—On uterus itself.

B.—On surrounding organs and tissues.

1st—The interstices of a fibrous tumor may become dilated into cysts or cavities containing a serous fluid from excessive exhalation of the intervening cellular tissue, and it is of extreme importance, inasmuch as they present fluctuation, and may be

mistaken for ovarian dropsy, hydrometra, acephalocyst of the uterus, or pregnancy. Several cases have happened in which a cyst of large size, developed in a fibrous tumor of the uterus has been mistaken and treated for an ovarian cyst. There is a specimen in Museum of Royal College of Surgeons, in which Sir E. Home twice tapped. Another in the Museum of St. George's Hospital, in which M. Cesar Hawkins drew off fifteen pints from a cystic tumor developed in the side of the uterine wall.

2nd.—In the unimpregnated uterus all forms, but especially the sub-mucous and interstitial are apt to be accompanied by severe recurrent hemorrhage reducing the patient to the last stage of exhaustion, produced by hypertrophy, inflammation and even ulceration of the mucous membrane necessitating their extirpation.

3rd.—M. Barnetche gives an example of an abscess being developed in the thickness of one of these fibrous tumors, occurring in a woman who died in forty-eight hours after a difficult labor, it is probable that the tumor was multiple, and that the abcess was developed in the hypertrophied cellular tissue uniting them.

Dr. Robert Lee found in the centre of a fibrous tumor, a cyst filled by a clot of blood. The same explanation as in last. It was in all probability developed outside the tumor.

4th.—M. Chassignac, (Bull. Soc. anatomique de Paris, 1843, p. 10) gives a very rare example where a fibrous tumor caused an occlusion of the uterine cavity, by adhesion of the opposing surfaces of the mucous membrane.

B.—On surrounding organs and tissues.

1st.—One of the most common is inflammation of the sub-peritoneal tissue, exciting local peritonitis, which may result either in adhesion of the tumor to surrounding organs and walls of the cavity, or in softening abcess, etc. Occasionally the uretur has been seen to be enclosed within an organized band of areolar tissue, interfering with the function of the kidney of that side. (Such a case occurred to me whilst at the Ecole de Medicine de Tours, France.)

2nd.—Not uncommonly, when the tumor is very large we meet with obstructions to the caval and portal circulations,

from pressure on the great veins, giving rise to dropsical effusions, varicose veins, etc.

3rd—Great distention of the colon, from pressure on the sigmoid flexure, if the tumor be of considerable dimensions and projects freely into abdominal cavity on its left side, giving rise to obstinate constipation.

4th.—From pressure on the viscera of the abdomen, the functions of digestion and assimilation may be seriously impaired.

The author acknowledges his indebtedness to the works of Paget and Bennett on tumors, and to the various works referred to in the text.

PUERPERAL ECLAMPSIA.

By RALPH N. ISHAM, M. D., Prof. Surgical Anatomy, Lind University, Chicago.

(Read before the Chicago Medical Society, Sept., 1859.

In the 10th No., 1st Vol., of the *Chicago Medical Journal*, was published the first part of an article upon Puerperal Eclampsia, intended to be finished in some succeeding issue. So long a time has since intervened, that it would not seem improper in now offering the continuation of that article, to give a resume of the views suggested at that time.

After defining puerperal eclampsia, I adverted to the fact that albuminous urine is always present in puerperal convulsions, and discussed the question of its identity with Bright's disease, detailing the reasons put forth in support of, and in opposition to such theory; aiming myself at the conclusion that the former may exist without Bright's kidney being present (since autopsies of eclampsia in a minority of cases, shewed the absence of Bright's disease) and arriving generally at the following results.

1st.—That equally in Bright's disease, and puerperal eclampsia, the presence of albumen in the urine and urea in the blood were due to a disordered state of the kidneys.

2d.—That while in Bright's disease, the results were due to a permanent structural disorganization, typical of that disease, in puerperal eclampsia many cases were due to a tempo-

rary functional derangement of the kidneys consequent upon a variety of causes, then enumerated.

3d.—That such temporary derangement might proceed so far as to cause Bright's disease.

4th.—That sometimes it does not, because the existing cause being removed by parturition the kidneys perform their functions normally.

5th.—That eclampsia occasionally occurring in Bright's disease are due to a special cause—the derangement of the kidneys, and consequent inability to eliminate the urea.

6th.—That the eclampsia is not due to the presence of the urea in the blood only, but is due to the change of the urea into carbonate of ammonia.

7th.—That the cause of this change is not known.

In this paper which I offer to the Society to night, I simply propose to state some of the experiments which have justified the theory that urea is the cause of eclampsia, and the manner in which this poison acts upon the system.

It is stated that urea may be injected into the veins of animals without serious results, and that even the extirpation of the kidneys will not give rise to uraemic intoxication, and that no urea is detected in the blood after this mutilation.

Thus Bichat injected filtered urine, and Bernard, Lehman, and Frerichs, have injected urea into the veins of animals without any evil consequences, so that it would appear that urea is one of the constituents of the circulation, and in fact it has been repeatedly detected of late by several observers, in the healthy blood; but the difficulty of so doing, is apparent, when it is remembered that the healthy kidneys remove it with such rapidity that it never exceeds the one-fiftieth of one per cent. of the circulation; but on the contrary, in carefully observed experiments on animals, from which the kidneys have been removed, and shown no symptoms of uremia, *vomiting appears*, and in the vomited matters urea is present. And in the subsequent experiments of Bernard and Barreswell, it appeared to them as a singular circumstance that in those animals which survived a length of time the removal of the kidneys, that a period varying from 24 to 48 hours elapsed before urea could be de-

tected in the blood, and it became a question in what way the urea escaped from the system during this interval.

Two of the dogs died shortly after the *kidneys were removed*, the one from suffocation, the other from peritonitis. In the blood, which was carefully tested, no urea could be found, but the gastric fluids liberated on the addition of caustic-potash a suffocating ammoniacal odor, and the intestinal fluid and bile also disengaged large quantities of ammonia when similarly treated. They observed that in those animals which survived longer and died from exhaustion, that the gastric fluid was *increased* in quantity, and secreted during fasting and digestion; and that no urea could be detected in the blood until the animal became weak, and the gastric fluid diminished in consequence. Inferring from these experiments that after extirpation of the kidneys, the urea is eliminated in the form of ammonia by the intestinal tube, and chiefly by the gastric juice; that it is not to be detected in the blood until the vital powers have become so oppressed that the intestinal fluids are diminished in quantity to the extent that the supplementary channels for its separation are cut off.

A case recorded by Dr. McDowell, in *Dublin Hospital Gazette*, for March, 1856, is confirmatory of these facts.

A patient, aged 38, received a severe injury in the right side, followed by hæmaturia. In a few days vomiting supervened without symptoms of gastritis; tongue natural, and *no* tenderness of epigastrium. During the vomiting spells, the amount of blood discharged by the kidneys was greater, and the urinous smell very faint; whilst at other times it was strongly marked by the presence of ammonia. The erethism of the stomach increased, everything was rejected, and medicines useless; the mental faculties were unimpaired to the time death occurred.

An analysis of the vomited matters confirmed a suspicion of its containing both urea and ammonia; of the former in the proportion of one-fifth of a grain to fluid ounce. The renal secretions was alkaline. These results shew that the *stomach* assists the kidneys in removing urea in the form of ammonia (nitrogen) out of the system when those organs are in a diseased state, unable sufficiently to perform; and this vicarious

action may explain the reason why in *all* cases of suppression uraemia does not take place. Although the given amount of vomited matters may contain less quantity of urea than the urine in a healthy condition, it is ccmpensated for by the greater amount.

In the experiments of Bernard and Barreswell, the animals continued awake so long as this ammoniacal secretion poured out by the stomach continued, but directly it ceased, the symptoms of uraemic intoxication set in.

Frerichs' has repeated these experiments, but differs with Bernard and Barreswell in supposing that the resolution of urea into carb. of ammonia in this uraemic vomiting takes place in the stomach, by asserting that it is effected in the blood and vascular system. Now, to produce uraemic intoxication, we must have, first, urea accumulated in the blood; and secondly, it must be changed into carb. of ammonia.

Frerichs likens individuals whose blood is impregnated with urea, to animals into the veins of which amygdalin has been injected; from the presence of this agent alone, as of urea, they suffer little inconvenience, but a single sweet almond taken into the stomach suffices to deluge the blood with prussic acid, causing death instantly. The same reaction takes place through the stomach or its circulation as when an emulsion of sweet almonds is added to amygdaline, giving rise to a volatile oil and hydrocyanic acid, the emulsion acting the part of a ferment.

To prove the theory that eclampsia is the result of uræmia, it must be shewn

1st.—That in all cases of uraemic intoxication the urea must be converted into carb. of ammonia.

2d.—That the symptoms of *eclampsia can be produced by the presence of carb. of ammonia in the circulation.*

Two series of experiments by Frerich's are offered as the required proof.

In the first, a solution of 30 grs. of urea was injected into the veins of animals, from which the *kidneys had been previously removed.* In from 1¼ to 8 hours they became restless, vomited acid chyme, or alkaline, according to the state of fullness of the

stomach at the commencement of the experiment. At the same time that ammonia was perceptible in the expired air, convulsions supervened, which occasionally ceased and returned again, and gradually passed into stupor with stertorous breathing.

In some cases convulsions were absent, and then sopor and coma were the first symptoms. After death, which occurred in from 2½ to 19 hours, ammonia was found in large quantities in the *blood*. The contents of the stomach remitted a strong urinous odor, and contained much ammonia; in *one* case only was it acid, and even then it contained ammonia. The stomach was injected, the brain and membranes being normal in appearance.

In the second series of experiments, a solution of carb. of ammonia was injected into the veins of animals; violent convulsions *instantly* ensued, and stupor quickly supervened; respiration was difficult, the expired breath was loaded with ammonia during the whole time. Gradually the latter disappeared, and by degrees the animals recovered their senses. When more carb. of ammonia was injected while the animals was in a state of stupor, the convulsions and vomiting recurred, and the urine and stools were passed involuntarily. After a lapse of 5 or 6 hours the ammonia again disappeared from the blood and the animal became again lively.

If the urea in the blood be too suddenly decomposed the symptoms are those of convulsions and apoplexy, but if the change takes place more slowly, the symptoms are those of typhus.

Thus it is said that in some blood diseases this element of ferment is seldom absent, as in scarlatina and typhus. The altered condition of the blood, which will not coagulate, the subsultus tendinum, and the presence of ammonia in those cases where a scanty secretion of urine is effected, being the symptoms.

In cases of scarlatina, followed by anasarca, the patients sometimes are affected by coma and convulsions, accompanied with albuminuria, and recovery often-times takes place without any organic change in the kidney following.*

If the patient, during the period of desquamation be exposed

to cold, anasarca is produced. The kidneys in such cases are increased in size to 8 or 10 ozs., the outer coat peels off readily, the cortical substance is injected, giving rise to hemorrhage and exudation from rupture of the capillaries. The minute vessels and tubules become in part obliterated and in part compressed, and finally albumen is separated with the urine, and the imperfect action of the kidney prevents the elimination of urea.

The presence of ammonia and the very unfrequent occurrence of convulsions, look towards the fact, that the urea is passed off by the skin and mucous membranes in the form of ammonia; but as the vital powers sink from exhaustion in such cases, the patients die comatose, and sometimes with eclampsia. So also in typhus fever and cholera has urea and ammonia been found to be present, accompanied with symptoms of uræmia, in cases complicated with more or less suppression of urine; and many observers already regard the symptoms of what is termed cholera typhus as the result of uræmic intoxication.

INTERRUPTION OF HEART'S ACTION. CAUSE—MASTURBATION.

By B. WOODWARD, M. D., Galesburg.

On the evening of 22d Dec. last, I was sent for to see ——, age 22. For several weeks past he had been in poor health; very pale and feeble. Found him in bed complaining of great weakness. No pain in any part; tongue clean and moist, but very pallid; conjunctiva and pro-labia blanched; countenance anxious. His pulse was but 32 per minute, and very labored; respiration 8 per minute. Auscultation revealed no organic disease, either of lungs or heart. As no apparent cause could be found for this depressed condition, I questioned him as to his habits, when he acknowledged the practice of masturbation, and that it was from the last act, twenty-four hours previously, that he had been aware of a sense of sinking.

℞ Brandy, ℥iv.
Spts. Ammon. Arom. ℥i.
Quinia, ℈j.

A teaspoonful to be taken every half hour.

His pulse continued to sink till 11 P. M., when it was but 28 per minute, and respirations 5, with rapid failure of every vital power. Ordered Quinia, grs. v., Brandy, ℥ ss., every hour, with sinapisms to the extremities. This treatment continued for 12 hours brought the pulse to 45, respiration to 10, every third, and sometimes every third and fourth beat of the pulse intermitted. ℞, Quinia ʒjss., Iron by Hydrogen, grs. xxiv. in Cht. No. xii. One to be taken every three hours with Brandy ℥ ss., Arom. spt. Ammon. gtt. x, with each powder. This for 48 hours brought the pulse to 65, intermissions as before, respirations 15. Continued treatment 24 hours longer; pulse 70, every fourth beat wanting. Omit Brandy and spts. Ammon., and continue Quin. et ferri. Twenty-four hours later, pulse 75, rather labored, fourth beat occasionally wanting; to take Quinia, grs. iij., Iron by Hydrogen, grs. ij every six hours.

Jan. 1st. He is walking about comfortable, but weak; advised him to omit quinia, and continue the iron for some days. Gave him a good lecture on habits and dismissed the case. Up to this time, Jan. 27th, he has been constantly improving, and thinks he is cured of his bad propensity. Though I have been familiar with the victims of this vice, and watched its effects, I have never before witnessed such a sudden depression, or derangement of the heart's action; neither do I fully understand it. The prostrated anæmic condition, *gradually* obtained, I can understand, but not the *sudden* failure.

In his case there was no derangement in the functions of the brain, the memory was perfect, and to within forty-eight hours of my being called he had continued his occupation, which required constant thought and attention.

TRISMUS NASCENTIUM SUCCESSFULLY TREATED WITH SULPHATE OF QUININE.

By H. A. JOHNSON, M. D., Chicago.

I was called Dec. 25th, 1859, to see the infant child of Mrs. C., which had been seized about two hours previously with convulsions. The child was a female, two days old, and up to the time of the attack apparently in perfect health.

The convulsions were tetanic in their character, and accorded perfectly with the symptoms of this disease as described by those who have seen it frequently in more Southern latitudes. Two similar cases occurring in my own practice both died.

The head was thrown back; the breathing difficult, and at times almost entirely suspended; the skin was moderately cool, and the pupils quite natural in appearance. The heart's action during the paroxysms which recurred at intervals of from twenty to fifty minutes, was very much reduced in frequency, apparently on account of the asphyxia. The jaws were closed, with partial and sometimes complete relaxation between the paroxysms.

Previous to my arrival the child had been placed in a warm bath, without any perceptible benefit. The bowels were immediately moved by an enema, and ipecac given *ad nauseam*. Sinapisms were applied to the extremities. The kidneys were acting normally. Subsequently Fl. Ext. Conii was given internally.

None of these means, so far as I could judge, had any beneficial influence. The slightest noise in the room, a jar or even a ray of light, was sufficient to induce severe general spasms. At 11 o'clock in the evening of the second day, thirty-four hours from the first attack, I gave the little patient one grain of sulphate of quinine. In a few minutes a severe spasm came on, differing in no respect from the fifty or sixty that had preceded it. The next interval was a full hour, a longer period than any which had hitherto occurred. The paroxysm was slight and shorter in duration than usual. For the next two hours the patient rested in a sweet and gentle sleep. On awaking there was a little closure of the jaws, and slight spasm of the muscles of respiration, but nothing in comparison to the fearful contortions that we had previously witnessed. For the next five hours there was not the first symptom of a convulsion but at 7, A. M. the lips became somewhat livid and the breathing irregular. This lasted only for a few minutes. I immediately gave another grain of the sulphate of quinine. From that time there has been no symptoms of a return of the disease, and the child is now perfectly healthy.

Remarks.—In the first number of the *Examiner*, my colleague, Prof. Andrews, reports a case of tetanus treated by me some years since with large doses of sulph. quinine. The patient recovered. I was induced to resort to it in that case from having seen, I think in the *New Orleans Medical Journal*, the report of a case successfully treated by this agent. The analogy between traumatic tetanus and the convulsions occurring in new born children, led me to the use of the same remedy in the case detailed above.

The points of special interest in the case are:

First.—The extreme rarity of the disease in this latitude. Old practitioners claim that it is never met with here.

Second.—The locality in which this case occurred was one of the most healthy in the city, near the lake shore, where there was always an abundance of pure bracing air. The mercury at the time was but a few degrees above zero.

Third.—The mother previous to her confinement had been in perfect health and the child had been properly cared for; there was no inflammation or ulceration about the cord; the bowels and kidneys were normal in their action.

Fourth.—The chief point of interest in the case consists in the fact, that while the disease is almost uniformly fatal under whatever treatment has hitherto been adopted, this little patient after having suffered continuously for thirty-four hours was effectually and permanently relieved after the administration of two doses of sulph. quinine of a grain each, the relief beginning to be experienced within an hour after the first portion.

A grain of the sulph. quinine is certainly a large dose for an infant three days old, but if given at all in such cases I think the quantity should be sufficiently large to produce its full sedative effect upon the nervous system. In this case I fully believe that it saved the life of my patient.

NOTES UPON DIPTHERIA.

By JOHN H. HOLLISTER, M. D.

In a previous paper I submitted the history of a case of dip theria, in which there was expulsion of false membrane more

perfectly developed, and giving a perfect cast of the trachea and bronchial tubes to a greater extent than I have any where noticed in the history of this disease.

The subject was a vigorous lad of 7 years, the inflammation of most decided sthenic character, with remarkably plastic effusion resulting in the formation of false membrane, so firm as to be freely examined, and which still continues to represent the perfect outline of the trachea and larger bronchial tubes. The history of that case was furnished at the request of the Chicago Medical Society, the specimen having been presented for examination before that body.

We seem most to need a careful description of the various pathological appearances and symptoms which occur in the progress of this disease and its *various modifications*, to determine its pathology and appropriate treatment.

A second case of diptheria occurring at the same time and in the same family as the one previously reported, is of especial interest from the fact that in the latter instance there was no formation of false membrane whatever.

The two patients were quite dissimilar in physical development, and as in the first instance there was remarkable fibrilation of the diptheric effusion; so in the latter, there was an entire absence of any fibrous formation whatever, and the extreme phases of diptheria as developed in *sthenic and asthenic* patients could hardly be found in more perfect contrast.

Katie F., aged 5 years, of slight figure and delicate appearance, had suffered for four or five days with what was termed a "croupy cough." When I was called to visit the older brother, (whose case was the subject of my first report) Oct. 4th, 1859, she was deemed so much relieved that my attention was not directed to her.

During my second visit, I noticed her more particularly, and hearing her cough made a careful examination of her throat, and soon convinced myself that she too was suffering from diptheria. The congestion, though intense, was of a passive character; the tonsils were much enlarged, and the whole of the mucous membrane in the posterior part of the mouth of a dark livid color. There was but slight secretion of mucous, the

parts were enormously congested, and the labored respiration indicated the same condition of the trachea and bronchial tubes as was so apparent in the fauces. The results of asphyxia began to develope themselves as early as the morning of the second day, and the appearance of the mucous membrane was much changed. From being smooth, nearly dry, and of a dark and almost shining appearance, the parts were now covered with an abundant sanious discharge, which seemed to be discharged from the entire congested surfaces. The application of the sponge was followed by profuse expulsions of the same character from the trachea. The discharge from the nose indicated that the schneiderian membrane was also involved in the difficulty. The aeration of the blood was very imperfectly performed, from the abundance of this secretion in the bronchial tubes. Though the expectoration was profuse, yet no effort on the patient's part afforded other than temporary relief. The livid appearance from capillary congestion early indicated the inevitable result, and she sank with scarcely a struggle in two days and a half from my first attendance.

In this instance there was general vital prostration from the first, and the lowest grade of inflammatory action. The sanious discharge from the over-distended capillaries indicated their entire want of tone, and the effusion was perfectly aplastic in character.

It should be mentioned, that nearly a year previous to the date mentioned, both the children had suffered severely from scarlatina. There had been in each instance severe inflammation of the glands of the neck. After partial recovery, in each case, a purulent abscess pointing outward required to be discharged with the lance. In the first instance there was a perfect recovery from the scarlatina, but in the second the recuperative powers of the little girl never seemed sufficient to restore her to her former health. Her recovery was at best but partial, and being more than usually delicate, she was in every respect a fit subject for the development of asthenic diptheria.

The treatment in this case consisted of Quinine and Muriate tincture of Iron, with gargles of Cayene and Chlorate of Potash, and local applications of Nitrate of Silver in solution, in addition to a nourishing diet.

CLINICAL LECTURE ON ERYSIPELAS.

Delivered at Mercy Hospital, by E. ANDREWS, M. D.,
Surgeon of the Hospital, and Professor of Surgery in the Medical Department of Lind University.

Gentlemen:

I present before you here a case of disease of a kind which will often confront you to your sorrow in your professional career, and which will occasionally bring your best planned and most brilliant surgical efforts to a disastrous termination. It is a case of traumatic erysipelas. This subject is so imperfectly understood by the profession, and so wretchedly descanted upon even by our best text books, that I have to some extent been obliged to investigate it *de novo*, and am obliged to condemn some very common precepts of the best authors. At the same time the importance of a correct knowledge of the disease is such that we may well spend our whole hour upon it.

Gentlemen, Erysipelas in some form or other, is the cause of more deaths after surgical operations and injuries, than any other single condition.

It is comparatively a rare thing in modern surgery to have a patient die from the effects of a pure and simple inflammation. Such has been the progress of our art, that we are ab'e to cut short with promptness and great certainty almost every case of simple acute inflammation that presents itself to us. But the slightest experience shows the surgeon that when he meets a case of traumatic erysipelas, he has something more than the ordinary effect of a wound to deal with, and that there are malignant tendencies present which must be met by other measures than those of a simple antiphlogistic character.

After a full consideration of the subject, I have adopted the following definition of this scourge of surgery. *Erysipelas is an inflammation produced by the presence of a peculiar organic poison acting upon a system laboring under an aplastic diathesis.*

These three elements, the inflammation, the poison, and the aplastic diathesis, will constitute at all times an erysipelas, but if either one of them be absent, the case is not erysipelas, but something else. If the poison be absent, we have simply an inflammation with an aplastic effusion. If on the other hand the poison be present, but the aplastic diathesis be wanting,

then the inflammation will be limited by plastic effusion, and will be a boil, a carbuncle, or some other circumscribed abscess.

The existence of the peculiar poison of erysipelas is proved by innumerable instances of innoculation. Before this patient came to the Hospital he poisoned no less than three members of his family. The first was his mother, who had a scratch upon her finger, which received the poison while dressing the limb. The result was a bad whitlow on the finger. The pus from this whitlow having been brought in contact with her eyes, she had an acute purulent ophthalmia. A sister of the patient having soiled her hands with the dressings, rubbed carelessly a raw pimple on the side of her face, and had as a consequence a decided erysipelas in the face. The father poisoned one of his hands in a similar manner, and had a slight erysipelas following it. A patient of a friend of mine had erysipelas in the leg which was communicated to an attendant in a similar manner, causing the death of the latter, by sloughing of the affected tissues and by pyæmia.

These instances are taken from many which have fallen under my observation, and they all go to shew the existence of this peculiar poison.

The poison existing in certain subjects in the dissecting-room is of the same character, and during several years experience as demonstrator of anatomy, I had formerly an opportunity to satisfy myself that poisoning by dissection wounds is in every instance an innoculation of erysipelas, and that it will only prove fatal when inserted into systems under an aplastic diathesis.

The erysipelatous virus is of different degrees of virulence in different cases. In some instances it only irritates the tissues enough to cause a moderate serous effusion into the areolar spaces, while in others it goes through the meshes of the supercial fascia like a solution of caustic, killing and half dissolving the tissue as it goes, and causing gangrene over the surface of half a thigh or arm at once.

That an aplastic diathesis is necessary to the existence of traumatic erysipelas is proved by a most interesting series of observations. There have occurred within the sphere of my

observation many instances where different persons were inoculated at the same time, and I observe that the effect of the same virus is widely different in different persons. Thus, if the system of one is vigorously plastic, as shown by a quick healing of all cuts and scratches, an inaptitude for suppuration, and an active and healthy state of those secretions of the body which are normally acid in their reaction, such a person *cannot have erysipelas.*

If the virus is inserted into his tissues, it will be immediately circumscribed by a plastic effusion, a regular abscess will form, and the poison be ejected along with the pus. If the poison be very virulent, it will produce a slough, and a carbuncle will result.

A medical officer of the U. S. Army, informed me that he in company with another surgeon once made a post mortem examination of a child that had died from erysipelas. Both these gentlemen wounded themselves slightly in the dissection. In the case of my informant, who was in a strongly plastic diathesis, the poison was limited by plastic effusion, and the wound became the seat of a carbuncle. His companion, however, whose system was in a less favorable condition, had traumatic erysipelas in a bad form and died.

You see therefore why it is that antiphlogistics fail of their usual effects in inflammations of an erysipelatous character. While you are attempting to subdue the action by cold and purgatives and bleeding, a malignant poison is filtering through the tissues and destroying them. What we have to do in this disease is chiefly comprehended under two heads. First, to antidote the poison, and secondly, to correct the aplastic diathesis, and I am happy to inform you, gentlemen, that the means of accomplishing both these ends are now discovered.

Iodine has the power of destroying most, if not all organic poisons. Even the venom of serpents when mixed with it becomes harmless. The application of Tincture of Iodine to erysipelas is an old and favorite mode of treatment, and one worthy of all commendation. The ordinary method, however, of simply painting the affected part with the tincture two or three times a day, is by no means as decided a treatment as

these cases often demand. In the present instance I shall order cotton batting *dipped* in the tincture to be wrapped around the whole arm, and confined by a piece of india rubber cloth to prevent evaporation. In this way I expect to produce a more active and complete absorption of the remedy than usual. It is probable that chlorine, bromine, and also that allotropic form of oxygen called ozone, have all antidotal powers similar to those of iodine, but as yet they are not much used for this purpose.

The second indication in this case is to effect an immediate change of the patient's diathesis from the aplastic to the plastic. Now it is becoming a favorite opinion with pathologists that the aplastic diathesis depends upon the presence of an excess of alkalies in the system, and that in particular ammonia is in excess in a variety of low adynamic forms of disease. In confirmation of this opinion is the fact that those remedies which most rapidly promote the plastic diathesis are all capable of neutralizing free alkalies. Such are the mineral acids, the soluble sulphates, iodides, chlorides, and nitrates of iron, copper, zinc, silver, and mercury. But among all these, I know of none practically so valuable for internal administration as the perchloride of iron, either in the form of a watery solution, or of the muriated tincture. With this remedy we have almost complete control over the diathesis. I have not time now to detail cases, but, gentlemen, I know what I assert when I say that with this remedy a total change in the diathesis can be made in twenty-four hours, so that at the end of that time an erysipelas shall not be able to extend to any new tissues. You must not think to accomplish this however by feebly prescribing twenty drops three times a day. I shall order this patient twenty drops every hour night and day, and such is my confidence in the result that I predict to you that to-morrow morning as we enter the ward you shall see a marked diminution of the swelling, and at the end of forty-eight hours I expect to discharge the patient convalescent. This use of the perchloride of iron is a recent advance in surgery, and one of the most valuable improvements ever made. It is only in the early stages of the disease that you can predict its success with the confi-

dence which I have done in this case. After suppuration has already occurred, an organic mischief has been done which time alone can repair, although the remedy is still useful to prevent further destruction.

That domestic remedy, the cranberry poultice, is probably useful, correcting by its acid the excess of alkali in the diseased part, and so promoting plasticity. I caution you, however, against expecting any plastic result from the *internal* use of vegetable acids. In the stomach they are all digested and destroyed, leaving no acid product.

Finally, gentlemen, in the low forms of this disease, never give ammonia as a stimulant. The system is already dissolving and breaking down into alkaline pus and serum, and every drop of ammonia adds to the fatal excess of alkali which produces the morbid result.

CLINICAL REPORTS.

Mercy Hospital. Female Ward. Service of Dr. N. S. Davis.

Case 1st.—*Typhoid Fever.* Those members of the class in attendance on the clinical instruction given in this Institution during the month of October, had an opportunity of seeing many cases of continued fever in all stages of their progress.

The case now before you is that of a woman, aged 25 years, native of Ireland, who was admitted into the hospital yesterday. She had been previously confined to her bed ten or twelve days. You observe that the expression of her countenance is dull; the face suffused with a dark flush; the lips dry and of a purplish color; the tongue covered in the middle with a dry, brown coat; the skin dry and slightly elevated in temperature; the abdomen full and tympanitic; the bowels are evacuated from three to six times in the twenty-four hours, the discharges being thin and brown, with some whiteish flakes; the pulse 110 per minute and weak; hearing obtuse, and mind dull with disposition to delirium during the night. From this group of symptoms it is easy to determine that the patient is laboring under an attack of continued fever, of the typhoid or enteric

variety. The continuous low grade of fever, the state of the tongue, the tympanitic abdomen, with characteristic intestinal discharges, are sufficient to determine the nature of the disease. It is already at the commencement of the third week in its progress, and you find the symptoms indicating two primary and important pathological lesions, strongly developed. The first of these lesions consists in a depressed or impaired state of the properties of both solids and fluids, throughout the whole system. Thus, as I have previously shown you, the blood is darker color, and the fibrin less coagulable than in health; and the susceptibility of all the organized structures is impaired, as strongly indicated in this patient by the dark, dingy hue of the face; the dulness of intellect and special senses; the awkwardness and irregularity of muscular movements; the want of vigor in the movements of circulation and respiration; and the general diminution of secretion. The second lesion is the well known disease of the agminated glands of the ilium, here plainly indicated by the dry tongue, the tympanitic abdomen, and the brown liquid evacuations.

We find both these pathological lesions in all cases of the enteric variety of typhoid fever; but they present very variable degrees of development in different cases. In some cases the *first* so strongly predominates that the life of the patient is endangered from the extreme impairment of the properties of the solids and fluids, or what is more commonly called "early and severe prostration;" with only slight symptoms of intestinal disease. While in other cases the first is only slight, and the second or intestinal lesion predominates from the beginning of the fever, and the life of the patient is put in jeopardy only by the extent of the consequent ulcerations in the glands of the intestine.

In the patient before you, gentlemen, both these pathological conditions are sufficiently developed to render the prognosis doubtful, though we think she will recover.

Treatment.—On this subject we cannot agree with those who tell us that typhoid fever is a self-limited disease, destined to run a definite course, and therefore the whole duty of the physician consists in adopting judicious hygienic regulations, and

paliating symptoms. On the contrary, we think the pathological conditions here present afford as well defined indications for the use of remedial agents as do the paroxysms of an intermittent. If you look upon this patient with the eye of an intelligent and rational pathologist, you will see in the dark hue and impaired quality of the blood an indication for the use of some agent that will increase the capacity of that fluid for absorbing oxygen and parting with carbonic acid gas, thereby restoring its normal color and arresting the further deterioration of its qualities.

You will see with equal readiness, in the general impairment of those properties of the solids which we call susceptibility and vital affinity, the symptoms of which were pointed out in detail a few minutes since, an indication for the use of some remedial agent calculated to increase and sustain these properties. Finally, you see in those symptoms that point directly to a well-known lesion in the mucous membrane of the ilium, an indication for the use of such agents as will allay the sensibility, and increase the tone of the capillaries of the intestine, and thereby arrest the processes of softening and ulceration of the glands.

Here, then, you have there well-defined indications for treatment, founded on the actual pathological conditions of the patient. But what are the means for fulfiling these several indications? If we remember rightly, it was M. Claude Bernard, who a few years since performed a series of experiments to determine the influence of different agents on the capacity of the blood for absorbing oxygen, which resulted in showing that chloride of sodium, chlorate of potassa, and several other salts, uniformly increased such capacity; some of them in a striking degree. It had long been known that some of these salts possessed the power to change a clot of venous blood to an arterial color, and to retard the dissolution of its constituents. Taking the hint from these facts, we commenced four or five years since to use the chloride of sodium and chlorate of potassa to fulfil the first indication, just pointed out, in the treatment of all the low forms of continued fever. And the more we

have used them the more confidence have we felt in their remedial value.

For fulfiling the second indication, the profession have long looked to the class of diffusable stimuli, at the head of which stand the various alcoholic beverages. But the results of their use have not been altogether satisfactory. The reason for this can be readily discovered by studying closely their *modus operandi* upon the human system. By such study it will be found that instead of exalting the elementary properties of the organized structures of the body generally, they simply exhilerate or excite the nervous tissues, while they actually lessen the interchange of carbonic acid gas for oxygen by respiration. Hence they are calculated to fulfil the indication in question very imperfectly at best. If you turn your attention a moment to the great field of nature, you will see that oxygen is the great excitor or supporter of the properties and molecular actions of all living organized matter. And its power to excite all the organic movements of the human system will be known. It is evident, therefore, that if in a case like this before us we could increase the quantity of oxygen in the blood, it would constitute the most efficient remedy known for increasing the depressed susceptibility and renewing those organic movements which are now so sluggish. As we have already explained, certain saline remedies do possess the power to increase the capacity of the blood for absorbing oxygen. Hence when introduced into the system as medicines, they not only improve the color and preserve the integrity of the blood itself, but by increasing the quantity of oxygen absorbed in the lungs, they supply the most universal and efficient excitor of the vital properties and movements with which we are acquainted. Thus the same remedial agents that directly fulfil the first indication, indirectly fulfil the second also. These same considerations shew you why it is so important to keep the room of the continued fever patient well ventilated or supplied with pure air. The third indication plainly requires the use of such agents as will combine the properties of an anodyne with a peculiar local stimulant or astringent, such as opium with nitrate of silver, or sulphate of copper, or oil of turpentine; more

especially in the middle and advanced stages of the disease. In accordance with these views we shall prescribe for this patient 8 grs. of chlorate of potassa dissolved in water, every four hours; and a teaspoonful of the following emulsion two hours after each of the doses of the chlorate:

℞ Ol Terebinth. ℥ ii.
Tinct. Opii, ℥ ii.
Pulv. G. Arabac. } aa. ℥ iii.
Sacchar. Alba. }
Rub together thoroughly and add
Mint Water, ℥ ii.

She must also be fed regularly with beef-tea well seasoned with salt, or milk-porridge, made by adding wheat flour to boiling milk.*

Case 2d.—This woman is also laboring under typhoid fever, complicated with a low grade of pneumonic inflammation in the right lung. The case was fully presented to you a few days since, when you individually examined the affected lung with the stethescope. As you now note her progress, we simply remark that all her symptoms are improving, and that the treatment previously prescribed will be continued, with the addition of a blister to the right side of the chest.

Case 3d.—*Syphilitic Ecthyma, with ulceration of the fauces*

We will detain you a short time longer this morning to examine this woman, native of Ireland, aged about 35 years; naturally of good constitution, but now slightly anemic, with an ugly looking eruption upon her face. In looking closely at this eruption you will see that each sore has an elevated base, surrounded by a dark red areola, the cuticle elevated in the centre, and filled with pus. They vary in size from the diameter of a pea to that of a dime. Nearly all of them have a thick brownish yellow scab in the centre. They evidently belong to the class of pustular diseases, and of the variety called Ecthyma. They are distinguished from Impetigo by their larger size, more conical form, and the thicker scabs. They differ still more from Rupia by the yellowish color of the scabs, and the appearance of pus surrounding the scab, between its edge

* The above treatment was strictly carried out, and the patient convalesced in one week after admission, or three weeks after taking to her bed.

and the sound skin, while in the latter disease the scabs are quite black and closely adherent at their edges to the surrounding skin.

If you look into the fauces of the patient you will see a large ulcer which has penetrated entirely through the soft palate immediately above the uvula. The dark red color around this ulcer, like that around the eruption on the face, indicates the existence of a syphilitic influence. Hence we shall put the patient upon the use of the following prescription:

℞ Tinct. Cinchonæ ℥ ii.
Hydrarg. Chlor. Corrosiv. 1 gr.

Mix—take one teaspoonful before each meal-time and at bed-time. We will also touch the ulcer in the throat with a stick of nitrate of silver every other day. After the patient has taken the mercurial until its effects upon the gums can be seen in a very slight degree, we shall substitute therefor the iodide of potassa in pretty large doses, and continue it until the disease appears to be entirely removed, which usually does not occur sooner than six or eight weeks.

CLINIQUE OF PROF. DAVIS IN THE MEDICAL DEPARTMENT OF LIND UNIVERSITY.

Saturday Afternon, Jan. 28th, 1860.

Case 1st. *Disease of the Heart.*—Gentlemen, the patient who presents himself before you is a native of Ireland, aged about 35 years, a blacksmith by trade, and possessed of a well developed physical frame. You observe that his breathing is short and hurried, much like one who has been running; his face and lips rather pale and slightly bloated; his tongue covered with a whiteish fur; his skin above the natural temperature and dry; his pulse moderately full, hard, and 100 per minute; and he complains of a great sense of fulness or oppression in the chest, with a pretty severe dull pain in the cardiac region, increased to a sharp or acute quality on taking a full breath, or coughing. He has severe paroxysms of coughing, and is unable to lie down in a horizontal position without

producing a great sense of suffocation, and is consequently obliged to spend his nights with the body in an erect or semi-erect position.

The pain in the cardiac region, accompanied by some fever, commenced about two weeks since, and very soon after an injudicious exposure to wet and cold. These general symptoms, and especially the pain in the region of the heart, coupled with the disturbance of circulation and respiration, would lead us to suspect the existence of cardiac inflammation. To determine this with certainty we must make a physical exploration of the chest by means of auscultation and percussion. On removing the covering from the left side of the chest, and placing the hand over the cardiac region, the impulse of the heart was found much stronger than natural, and percussion shewed that it occupied a larger space. Application of the stethescope over the cartilages of the ribs covering the right side of the heart revealed a well marked friction or rubing sound with each systole of the venticles, and also a rough bellows murmur. On moving the stethescope a little upwards and to the left, so as to rest over the base of the heart, the bellows murmur became more plain, very rough and prolonged, so as to completely suppress the short second sound. The signs thus elicited, clearly indicate not only the existence of cardiac disease, but its existence in a severe and complicated form. The friction sound indicates a recent and still existing inflammation of the pericardium, with more or less plastic effusion upon the surface of the membrane; while the rough and prolonged qualities of the bellows murmur, the dulness over a larger space than natural, with a strong and sustained impulse, certainly indicate considerable hypertrophy of the ventricles with disease of the semi-lunar valves. From the loud and harsh qualities of the murmur and the hypertrophy, it is evident that the disease of the valves has been existing a considerable time previous to the date of the patient's present illness.

He now explains this by informing me that he had a severe attack of rheumatism, accompanied by pain in his left breast two years since; and that he has been seriously troubled with shortness of breath and heavy irregular beating of the heart, especially on taking exercise, from that time to the present.

From all these facts we infer that the patient was attacked with rheumatic endocarditis two years since, which resulted in thickening of the semi-lunar valves, and the consequent gradual development of hypertrophy of the muscular structure of the ventricles. While the injudicious exposure to wet and cold two weeks since caused the supervention of a sub-acute pericarditis which still exists. Placing the patient in an easy position, each member of the class was permitted to take the stethescope and listen to all the morbid sounds that the case presented.

Prognosis.—The prognosis in recent attacks of inflammation of the heart, whether endocardial or pericardial, may be regarded as favorable. And so far as the pericardial disease is concerned in this case, we think it can be removed in a few days by appropriate treatment; though, as sometimes happens, the effusion of plastic lymph may cause adhesion of greater or less extent between the surfaces of the inflamed membrane. I have observed two cases, in which such adhesions existed so extensively as to unite the pericardium closely and firmly to the whole exterior surface of the heart, thereby completely obliterating the pericardial sac.

One of these was a recent case, and in addition to the adhesions, there was present intense redness and all the marks of acute inflammation in all the structures of the heart. The other case had been one of long standing, and the adhesions were so firm that it was with difficulty that the pericardium could be torn from the surface of the heart. If we are right in the supposition that this patient was attacked with endocarditis two years since, and that the thickened condition of the valves which now gives rise to the harsh bellows murmur to which you have listened, is the result of that inflammation, it is quite certain that such thickening and the hypertrophy consequent upon it, have become too permanent to admit of removal by any remedial agents known to the profession. On the contrary, the continuance of the valvular obstruction, will cause a gradual increase of the hypertrophy, until at length the patient becomes wholly unable to exercise; dropsical effusions supervene, and life is cut short.

Treatment.—The first object to be accomplished in the treatment of this patient, is to remove the recent inflammation of the pericardial membrane. This must be done by a prompt and judicious use of sedatives, alteratives, and counter-irritants. Had the patient come under our care during the first two or three days after the commencement of the present attack, we might have deemed it necessary to have taken at least one free bleeding from the arm. But two weeks having now elapsed and the patient feeling already debilitated, we do not deem venesection necessary. Consequently we shall endeavor to control the circulation by the following, viz:

℞ Spts. Nit. Dulc. } a.a. ℥ i.
Tinct. Opii et Camph. }
Tinct. Verat. Viride ℥ i.

Mix, and give a teaspoonful every four hours, diluted with water.

To change rapidly the tendency to plastic effusion, and consequent adhesions, and destroy the inflammatory process, we shall also direct one of the following powders to be taken between each of the doses of the sedative mixture, viz;

℞ Hydrarg. Chlor. Mit. 15 grs.
Pulv. Opii. 12 grs.
Nitras Potassa, ʒ ii.

Mix and divide into six powders.

By giving the opium in full doses, we shall not merely relieve the pain and restlessness of the patient, but we shall overcome that important element in all inflammations, which we denominate irritability, or more properly, an exaltation of the susceptibility of the inflamed structure; and thereby aid much in destroying the inflammatory process.

We shall continue these remedies until the calomel produces a slight effect on the gums, and then interpose a cathartic.

After the bowels have been freely moved, the previous remedies may be resumed with the calomel omitted; and a blister may be placed over the cardiac region.

It is probable that under the influence of these remedies, the present pericardial inflammation will be removed in from four to six days; but the valvular obstruction and hypertrophy, with some general debility will remain. If so, all active treat-

ment by medication may be discontinued. The patient must be instructed to wear flannel next the skin; avoid sudden atmospheric changes; make his exercise, mental and physical, as quiet as possible; avoid the use of stimulants, and highly seasoned articles of food.

In addition to these hygienic regulations, the increase of hypertrophy may be retarded by a judicious use of the milder sedatives, such as Digitalis, Gelsemin, and Acetate of Lead. But as this patient will probably return to the clinic next week, we will not comment on his case further at present.

Two children were presented to the class in this clinique, one afflicted with Bronchitis, and the other with Chronic Ague, but as the space allotted to these reports is already full, we must defer giving the substance of the remarks made concerning them until a future time.

CHICAGO ACADEMY OF MEDICAL SCIENCES.

Academy met in Bryant's Commercial College. President Dr. Hamill in the chair. The minutes of the last meeting were read, whereupon Dr. Gore to correct his remarks as reported, by inserting the words "a post mortem examination was not deemed necessary by the Jury," instead of "was not made in consequence of objections on the part of Parents." The minutes were accepted as corrected and ordered to be recorded.

Dr. Bloodgood, from Board of Trustees, submitted estimate for Furniture, etc. for new rooms, when the whole subject was referred to the Council for final decision.

Dr. Blake's resolution, the regular subject for discussion for this evening, was next called up, and the debate upon it opened by the mover, who urged the propriety of resorting to Tracheotomy in cases of membranous croup, as offering the best chance to save the patient, and quoted some cases to sustain his position.

Dr. Bloodgood did not approve of the operation, on the ground that the remedy did not reach the disease, which extended itself below the point at which the operation was usually performed.

The discussion was continued by Drs. Bevan, Blake, and McAllister.

Dr. Powell thought the operation much more dangerous than it was usually considered, particularly from the sudden introduction of cold air into the lungs, thereby reducing the temperature of the body—as proved by an experiment performed by himself during the day upon a dog, in which the temperature was reduced three or four degrees in half an hour, which rate of loss would have proved fatal within twenty-four hours.

Dr. Gore urged the claims of Turpeth Mineral in croup, and cited a case in point recently under his charge, in which it had proved entirely successful. He opposed the use of tracheotomy, and hoped to be forgiven for ever having advised it.

Dr. Davis approved the use of the Turpeth Mineral, which had proved very successful in his hands during a period of nine years. He was in the habit of urging its claims in his lectures to his class, and he relied mainly upon it in the treatment of this disease.

Dr. Hay gave notice of his intention to move at the next meeting certain alterations in the By-Laws.

Dr. Bevan (Treasurer) read a report of the financial condition of the Academy to date, when the accounts had passed into his hands.

The Secretary reported that in compliance with the instructions of the Academy issued at their last meeting, he had filed with the Clerk of the County Court of Cook County, a certificate of the organization of the Chicago Academy of Medical Sciences, as required by law to constitute this Academy a corporate body. A copy of this certificate was submitted and ordered to be filed with the archives of the Academy.

On motion of Dr. Jones, the subject for discussion at the next meeting was decided to be "Whether the Ferruginous Tonics are useful or hurtful in cases of Chlorosis occurring in Strumous subjects."

The President called upon the council to meet at Dr. Bloodgood's Office, on Friday Evening next.

Upon motion, the Academy adjourned.

BOOK AND PAMPHLET NOTICES.

ELEMENTS OF MEDICAL JURISPRUDENCE. By THEODORIC ROMEYN BECK, M. D., L. L. D., Professor of Materia Medica in the Albany Medical College, etc., etc., and JOHN B. BECK, M. D., Professor of Materia Medica and Medical Jurisprudence in the College of Physicians and Surgeons of the City of New York, etc, etc. Eleventh Edition. With Notes by an Association of the friends of Dr. Beck. The whole revised by C. R. GILMAN, M. D., Professor of Medical Jurisprudence in the College of Physicians and Surgeons of New York. In 2 vols, 8vo., pp. 884 and 1003. Philadelphia: J. B. LIPPINCOTT & Co. S. C. GRIGGS & Co, Chicago.

Medical Jurisprudence as defined, "is that science which applies the principles and practice of the different branches of medicine to the elucidation of doubtful questions in Courts of Justice." It is the administration of the law enlightened by medical knowledge. It is not the jurist sitting in judgment upon the medical man, but it is the latter aiding the former to discover the truth. And as in the ordinary exercise of our professional acquirements, the health and perhaps the life of the patient may depend upon the judgment and skill of the physician; so upon his testimony and knowledge may hang the fortune, the reputation, and even the life of the litigant. The physician is a welcome witness in every court, his opinion is sought with eagerness, listened to with respect, considered with care, and often in effect decides the merits of the case. How important then that the opinions of the medical expert should be enlightened and well founded. A verdict is seldom rendered against the clear, decided and unshaken testimony of scientific witnesses. As obvious as is the reliance of the jury upon the testimony of the medical witness, we are often chagrined to know that the character and standing of our profession is made a subject of ridicule, and brought into disrepute by the ignorance and unqualified pretensions of the medical witness. When we consider that the subject of medical jurisprudence is commensurate with medical knowledge, and that there is no time but that the same may be called into requisition to elucidate a litigated question. We hope that the time will never be again, when a student shall have attended three courses of lectures in any of our established Medical Schools, without having listened to more than *one* lecture upon this important branch. But until this subject is made universally a part

of the curriculum in our schools, the inquiring student must depend upon the information to be gained from the study of the most approved text books and authoritative treatises. And we hazard but little in affirming our belief, that the work mentioned at the head of this notice is the best and most comprehensive treatise to be found in any language. It has for many years occupied the foremost rank, and is so favorably known to our readers, that the announcement of this, the eleventh edition, is an all-sufficient recommendation. The previous character of former additions affords ample guarantee of continued improvements, and we have only to make a cursory examination of the volume before us, to be satisfied that the additions and addenda are both numerous and important The notes and inferences are selected with care and discrimination, and cannot fail to add materially to the practical value of the work.

Chapter 1st is devoted to Feigned Diseases, and chapter 2d to Disqualifying Disease; both have been carefully revised by R. H. Coolridge, M. D., Assistant Surgeon of the United States Army. Chapters 3, 4 and 5, have been prepared for the work by the careful and critical supervision of Austin Flint, M. D. Chapters 6 and 7, on Pregnancy and Delivery, have undergone a full revision by the aid of recently published facts and observations, by J. P. White, M. D.

The subject of Infanticide, by J. B. Beck, M. D., occupies a considerable portion of the 1st volume, and new cases are introduced illustrating the causes of death in new-born children. Also the history of Infanticide as it has prevailed in different nations; the murder of the fœtus in utero, with an account of the proofs and modes of perpetration; of the signs of Abortion, etc. The subjects of Legitimacy, Presumption of Survivorship, Age and Identity, Insurance upon Lives, respectively have been under the exclusive control of Prof. Gilman; and with that of Mental Aberration, by D. Tilden Brown, M. D., complete the first volume. The second volume contains a full chapter upon Persons Found Dead, upon Wounds of the Living Body, by John Watson, M. D. The most important part of the whole work is taken up in the consideration of the sub-

ject of Poisons, in which we observe that numerous cases have been added, including new facts regarding the fatal doses of some of these agents, and the pathological changes they produce; also the various improvements in the mode of applying tests for the detection of these agents, have been fully considered. The chapter on Medical Evidence is the last of the series, and while it is a subject that lies at the foundation of success in every department of medical inquiry, yet there is no way, as we have before suggested, in which the capacity of the medical man is so fully tested. A close attention to the suggestions contained in this chapter will prove interesting to the physician of experience, and particularly instructive to the young man who may desire to lay the surest foundation of a professional reputation. In short, those who are familiar with the character of the work in question, will be struck with many minor, but still useful changes, not mentioned in the preface. The index has been much extended and rendered more complete, and the execution of the work is neatly and carefully done: and we are satisfied that it will not only prove a manual comprehensive in detail, but will possess the weight and accuracy, as well as the fulness of an authoritative treatise.

On Criminal Abortion in America. By Horatio R. Storer, M. D., Member of the American Medical Association. Philadelphia: J. B. Lippincott & Co. 1860.

Although criminal abortion is practised to a fearful extent, we hope for the sake of humanity, as we verily believe, that Dr. Storer makes out too strong a case in the above named pamphlet. We have reason to know that the *morale* of criminal abortion is of the darkest character. That it is a crime equal in heinousness to that of murder, every physiologist knows. Hence no excuse should be allowed to palliate the punishment of it, as there is certainly none for its perpetration. The most alarming and the least excusable feature of its practice is, as we think, derived from the character and standing of the criminals. We believe from our own experience, as well as the testimony of our professional *confreres*, that the vast majority of the perpetrators of this fiendish infanticide, are people in what are styled the better classes of society; that many of them are not only held in high esteem by the world, but are active members of christian churches. Nay, Ministers

of the Gospel, of spotless reputation before the congregations and communities in which they reside and officiate; these clergymen and church-members often try to suborn the consciences of the members of our profession; oftner they employ the means furnished by cormorant-quacks and professional abortionists. Parents engaged in this practice imbue their hands in the blood of their own children; either directly, by immediate interference, or indirectly, by winking at its perpetration in their own families. They will tell any body who remonstrates with them that they do not view the matter in the light of a crime against the law of man, or a crime against God's law. Now we believe this assertion as reluctantly as we credit the statements of those unfortunate married men with whom we often meet, who contract gonorrhœa or syphilis from the seats of unclean privies. However unfortunate and damnable the practice in this class of people, and the encouragement their example affords to the commission in detail of this great sin, their degradation places them upon the highest round of the ladder of human depravity, compared to the depth in which the wholesale dealers in human blood are sunk, who are spreading all over the land, the information and means necessary to enable and tempt many who would otherwise be innocent of a thought in that direction, to strangle their own offspring. I allude to the proprietors of newspapers, who for money publish and recommend; and the druggists who so unblushingly placard and sell abortive nostrums and instruments. The manufacturers of these nostrums, and professional abortionists, are fiends comparable in their turpitude to nothing outside the gates of the infernal regions.

The above pamphlet is calculated to do good, and we are sorry that the people themselves cannot have the same facts set before them, as widely as the charlatan advertisements, which do so much to promote the evil this monograph is intended to expose. Let the public read it, and it will blush with shame at the extent and horrible bearing it has upon all the sacred ties and bonds which link mankind together.

[Introductory Lectures and Addresses on Medical Subjects. delivered chiefly before the Medical Classes of the University of Pennsylvania. By George B. Wood, M. D., L. L. D.

We have received and conned the pages of this volume of

the Introductory Lectures and Addresses, of Dr. Wood, with much pleasure and profit, and we are sure that a more worthy memorial of the relation that has for so many years subsisted between the author and the numerous classes of young men who have attended the University could not have been devised. They will also find a hearty welcome with the whole profession, of whatever predilection. And great as the delight must be of those who can indulge in the thousand glorious recollections aroused by the graphic history of scenes and persons once familiar to their daily sight; yet a far higher value must be attached to them, from the powerful stimulus such stirring pictures inevitably give to the pursuit of knowledge. No where can the student meet with a source of impulse that will urge him on to future attainments, and no where could he find more effectual inducements to emulate the most exalted efforts of the great intellects and distinguished leaders of the profession espoused, than in the perusal of these Introductories.

We find that the author has presented through this customary Introductory, the consideration of the important subject of Materia Medica, and as such will be the most valuable part of the work; but the two lectures which give the result of the author's professional observations in Great Britain and the Continent of Europe, have a peculiar interest and value. The whole volume, we trust will not only prove instructive and agreeable to practitioners and students throughout the whole country, but will serve as a serviceable book to such as may be willing to visit the scenes from which so many advantages and so much pleasure and satisfaction may be derived.

SELECTIONS.

The use of Aconite and Chloroform in Neuralgia.—In a letter to the *Med. Times and Gazette*, Dr. Gueneau de Mussy writes:—

"For more than three years I have prescribed it in neuralgia of different regions; but here I want chiefly to allude to the most common and severe of neuralgic pains—the facial neuralgia, in which I have derived from the above-named remedy

sometimes a complete and permanent cure, and always an almost immediate and considerable relief. In such cases I apply it directly to the gums of the side affected, where numerous divisions of the fifth nerve are most superficial. When the neuralgia is idiopathic, *i. e.* unconnected apparently with any other disease, the formula is:—2 parts of sp. of wine, or eau-de-Colonge, 1 of chloroform, and 1 of tincture of aconite; the finger covered with a piece of lint or soft thick linen, is dipped in the mixture and rubbed gently against the gum for a few minutes. I do not use a sponge, because it would take up to much of the liquid, which by pressure might drop into the mouth.

"When the pain is connected with some organic disease, as a deranged tooth, chronic inflammation of the gums, or of the sockets, or, as I have observed, superficial necrosis of the bone, I have found the tincture of iodine a very beneficial substitute for spirit of wine in the formula above.

"The infra-orbitary branch being the most commonly affected, it is chiefly in neuralgia in this part the application has been successful; but by no means exclusively so; it answers very well in pain of the lower branch, and I have observed some very severe cases of supra-orbitary neuralgia, in which the same application has been attended with an equally satisfactory result.

"This shows, moreover, that the sedative agent may produce its effect, as the irritating one so frequently does, on a part distant from the spot on which it was applied in the same, and even in a different branch of a nerve."

Alcohol and Alcoholic Preparations in Surgery.

We are indebted to Prof. T. Deville, of the Lind University of this City, for an early copy of the above monograph, which has been transmitted to him by the Author, on the use of Alcohol and Alcoholic Preparations in Surgery.

After having examined the subject by the threefold light of theory, experiment, and history; the following are the results arrived at:

"Alcohol coagulates albumen in whatever liquid it may be, and consequently in blood, the synovia of synovial membranes, of articulations, the serosity which bathes the meshes of cellular tissue, and that which moistens the surfaces of serous visceral cavities.

Alcohol applied to living tissues on the surface of a wound

provokes no sort of accident. We are convinced of this from repeated experiments.

It coagulates albumen on the surface of wounds, forming it into a greyish-white-pellicule. It stops the hemorrhage of the small vessels. It hastens the secretion of plastic lymph on the surface of the wounds. By separating the lips of the wound soon after the application of the alcohol, we can watch the lymph in the very act of gluing them together; that is to say, the same thing is taking place there which takes place on the surface of serous membranes.

From these facts and these principles it results that alcohol exercises a great influence on union by the first intention, that it prevents diffuse erysipelatous inflammation, purulent infusion of synovial membranes, and purulent infection.

Let us explain ourselves:

Alcohol favors union by the first intention, by stopping hemorrhage of the smaller vessels (since the blood is a great obstacle to a perfect coaptation of the parts) by immediately producing a coagulum on the surface of wounds, and by accelerating the plastic secretion.

It prevents diffuse suppuration by coagulating the albumen of the cellular tissue, which immediately becomes thick, and is rendered impermeable to the unhealthy liquids which bathe their surfaces.

Alcohol prevents the purulent effusions of synovial membranes by the immediate coagulation of the synovia, by causing the opposite surfaces to adhere, by rendering them impermeable to the liquids which moisten the surfaces of fresh wounds, and by encouraging an adhesive inflammation of the synovial membranes near the wound.

Alcohol prevents purulent infection, by coagulating the blood in the open and even gaping veins, on the surfaces of wounds, thus instantly plugging them and favoring an adhesive inflammation." * * * * * *

We must, therefore, in dressing recent wounds abandon the use of fatty bodies and poultices, and return to alcoholic preparations; in a word we must return to the practice of the ancients.

Chloroform and Cod Liver Oil in Diphtheritis and Scarlatina.

We clip the following as communicated to the *Boston Med. and Surg. Journal*, by E. S. Cooper, M. D., Prof. of Anatomy and Surgery in the Medical Department of the University of the Pacific.

"The original mortality attending diphtherite, both in this

country and Europe, appears to have been but little diminished by any course of treatment in general use. In some regions of country two in three cases terminate fatally; in others four in five; and in some localities of the United States probably there is even still greater fatality.

The first two cases I attended, both in one family, died. They were among the first patients I treated on my arrival in this city, over four years ago. Such was my ill success in attempting to cure these cases for some time afterwards, that I thought seriously of abandoning the treatment of the disease altogether. I had noticed, from the commencement of my practice in this disease, that the disposition to slough was always greater after I had used the probang. I attributed this partly to the effects of pressure, or bruising, incidental to the use of the instrument in young children, who are disposed to struggle. I have therefore abandoned all applications to the throat, and adopted the following method, which has thus far been successful beyond what my most sanguine hope could have anticipated. Of thirty-one patients, I have lost but one, and in that case the patient had been sick for several days, and died about eight hours after I first saw him.

My treatment is as follows: ℞.—Chloroform, ʒ iij.; ol. jec. aselli, ʒ xii.; spt. terebinth., ʒ ij. M. Signa. Apply freely all over the neck, breast, and abdomen, upon flannels covered with oil silk. This I keep on constantly during the continuance of the disease, and for eight or ten days after the patient has sufficiently recovered to walk about. The object of continuance is to prevent relapses, which are very frequent and fatal, without some preventive is used. And this is what is wanted in these cases. Internally, I direct the following to be administered: ℞—Ext. glycyrrh., ʒ iij.; acacia gum., ʒ i.; antimon. tart., gr. i.; sac. alb., ʒ ij.; aqua, ℥ xviij. M. Signa. Give a wine-glassful every two hours to a young child, say two years old, and increase in proportion to age. I have had as much, if not more, satisfaction in the results of the treatment of diphtherite on the foregoing plan, than in anything occurring in my professional life besides. I therefore recommend it with confidence to the medical profession. I have tried it with nearly the same success in scarlatina. During the course of treatment I do not give patients a particle of anything else; not a drop of water, nor the least nourishment, save what is in the medicine.

The compound keeps the bowels merely soluble, alleviates the cough, dryness in the throat, and difficulty of swallowing. I have, in some instances, added a grain or two of tartrate of

antimony to the compound, and occasionally omit it altogether. I am convinced that certain states of the atmosphere increase the malignancy of diphtherite, and that chloroform and cod-liver oil annul its effects almost entirely. The oil protects the skin, and the chloroform acts probably upon the air-passages, while the turpentine acts as a counter-irritant. I have been surprised, and highly gratified, by noticing the rapidity with which the stoppage of the nostrils and difficulty of breathing are often overcome through this agency, even in advanced stages of the disease."

Palatable Medicines.

In the *Semi-Monthly Medical News* for Dec. 1st, Dr. T. E. Jenkins has an article upon the above subject, from which we extract the following:

"The operation of sugar-coating pills is very simple, and may be practiced by any one. It is done thus: After the pills are finished, they should be rolled between the fingers, previously moistened with thick mucilage of gum-arabic, and while still wet, thrown together in a capsule or saucer containing a sufficiency of very finely powdered sugar, and rotated therewith until the surface is completely covered, after which they may be exposed to a gentle heat to dry them. If necessary, this process may be repeated in order to give a thicker coating." * * * "Powders may be mixed with aromatized sugar, in order to disguise their nauseous qualities, and every practitioner should be provided with a few bottles of sugar aromatized with orange, lemon, peppermint, or other agreeable volatile oil, so as to have always at hand the means of rendering less disagreeable the chartulæ for his little patients." * * * "A very elegant *bonbon* may be made by incorporating powdered drugs, or even medicinal extracts, with pulverized aromatized sugar and white of egg, in the manner in which confectioners make their 'icing' for cakes, and dropping on a tile from the truncated end of a paper cone portions of the mixture suitable for a dose, they soon dry when exposed to the air, and will be eagerly sought after by children."

Alcoholic Liquors in Tubercular Diseases.

In the October number of the *American Journal of Medical Sciences*, is to be found an able essay by Dr. John Bell, of New York, upon the use of alcoholic liquors in tubercular diseases,

or in constitutions predisposed to such disease. The following are the conclusions arrived at:

1. "The opinion so largely prevailing as to the effects of the use of alcoholic liquors, viz., that they have a marked influence in preventing the deposition of tubercle, is destitute of any solid foundation.
2. On the contrary, their use appears rather to predispose to tubercular deposition.
3. Where tubercle already exists, alcohol has no obvious effect in modifying the usual course run by that substance.
4. Neither does it mitigate, in any considerable degree, the morbid effects of tubercle upon the system, in any stage of the disease."

We are glad that the above conclusions coincide with the experiments, and substantiate the views of Dr. Davis, the senior editor, who since 1850, both through the columns of the *North Western Journal*, and in his course of lectures to the numerous classes that have listened to his instruction, has contended that the physiological and pathological effects of alcohol are such as demonstrate that it has no marked influence in preventing the deposition of tubercle, or arresting the course of the diathesis in the least, or that it modifies the effects of the same when it is fully established, to any considerable extent.

Utility of Veratrum Viride in a case of active hemorrhage from the gums and tongue.

We find a report of an interesting case of profuse hemorrhage in the January number of the *St. Joseph Journal of Medicine and Surgery*, in which, after the use of various remedial agents, veratrum viride was exhibited in the dose of five drops in a teaspoonful of sweetened water, increasing one drop every fifteen minutes. "The hemorrhage began to cease from the first dose, and about the third dose she appeared fully under the influence of the veratrum, it acting as an emetic, at which time the hemorrhage ceased altogether."

Influence of Quinine and Malaria over Pregnancy.

Dr. Davidson, of Arkansas, reports a case of threatened abortion, caused by malaria, and successfully treated with quinine. Dr. Davidson says: "Knowing the patient to have

been the subject of intermittent fever the summer and fall previous, it occurred to me that perhaps malaria was the cause of the uterine disorder. I therefore administered between fifteen and twenty grains of quinine the next day. She had no return of pains for about three weeks, at the end of which time they came on again. I stopped them with laudanum, but they returned daily, until I gave quinine." * * * "I several times withheld the quinine for a day or two, when the pains would invariably return; but when it was administered regularly it never failed to keep them in check."

A Revolution in Anæsthetics.

The Paris journals describe a new method of producing insensibility, or rather a new way of applying an old method, which may be available in some cases, but which must frequently fail. We copy from the *Lancet* the following account of the process:

"The patient, either sitting up or lying down, is put in a convenient position. The operator then, standing either before or behind him, places before his eyes, at the distance of a few inches, but generally nearer than the point which allows of distinct vision, some bright object, upon which the patient should steadily and continuously fix his eyes. The bright object should be so placed that the eyes, in looking at it, must be forcibly directed upward, the contraction of the superior recti being carried to its maximum degree. In this position, the levatores palpebrarum and recti are strongly contracted, and convergent strabismus takes place. After this attitude, which is certainly very fatiguing, has been kept up for two or three minutes, the pupils are noticed to contract, and soon afterwards to dilate; the eyelids quiver rapidly, then fall, and the patient is asleep. Two symptoms, almost always present, are then observed; they are however, in different cases, more or less marked and lasting: 1 catalepsy, exactly as described in books; 2, anæsthesia, which lasts from three to fifteen minutes, either complete or incomplete, but which allows of pinching, pricking, and tickling, without any feeling being aroused in the patient, and without any change in the cataleptic state being produced. This anæsthetic state is generally followed by a very opposite condition—namely, very remarkable hyperæsthesia, in which the senses, the feeling of heat and muscular activity reach an unusual degree of excitability. At any moment of the experiment the symptoms may suddenly be stopped, by rubbing the eyelids, and directing upon them a

stream of cold air. When the patients recover their senses, they remember nothing of what has taken place."

This is evidently nothing more than the phenomenon which is called Mesmerism, or animal magnetism, long known, little understood and frequently brought before the public as something new. The best account of it is to be found in the Five Essays of the late Dr. Mitchell, of Philadelphia.

Hydrophobia Successfully Treated with Calomel.

In the last number of the *American Journal of the Medical Sciences*, is the report of a case of hydrophobia, by Dr. J. E. H. Liggett, of Middleburgh, M. D., which recovered under the use of calomel, in the dose of one drachm every four hours, the intervals being diminished to six and eight hours, as the symptoms improved. Purgatives were also employed. There was only moderate salivation. The patient was a colored girl, 23 years old. Sixteen or eighteen days before she was taken sick, she had been bitten by a young dog, which had been unusually dull and morose for a day or two, who died afterwards with all the symptoms of rabies in its most virulant form. The symptoms began with pain in the great toe (the part bitten), extending up the limb toward the body. At the same time, from being a very lively girl, she became dull, moody, taciturn and irritable. The mind was clear, and she had frequent and violent spasms (of what muscle is not stated), which could at any time be excited by touching her, by a current of air, or by the sight of water or other fluids. There was intense thirst, but horror and immediate spasm from the sight of water; and expectoration of small quantities of viscid mucus. The pulse was of moderate frequency throughout. The medicine was followed by immediate relief, and the girl recovered in a week.

Dr. Ligget remarks that the diagnosis in the above case has been doubted, for two reasons: first, that the patient was a female, and secondly, that she recovered, the disease being supposed to be hysteria. Of course the fact that the patient recovered must throw some doubt on the nature of the disease, since there is no authentic record, so far as we know, of recovery from undoubted hydrophobia. We think, however, that the facts that the dog was mad, and that most of the symptoms of hydrophobia were present in the patient, are very strong reasons for believing that the case was one of genuine hydrophobia. At any rate it would be easy to try the remedy in another case.—*Boston Med. and Surg. Jour.*

Milk Sickness.

In the *Nashville Journal of Medicine and Surgery*, October, J. E. Nagle, M. D., has an article upon the above subject. He

considers the disease a peculiar form of typhus fever, and he supposes it to be produced by a poisonous fungus grass. He says, "that musty wheat and secale cornutum of rye will produce the gangrene typhus fever, is evidenced on good authority; that the fungus of grass has the same poisonous principle I am certain and I think will be admitted if the subject be examined."

With commendable zeal Dr. Nagle experimented largely. On lands upon which this fungus grass was largely found, he pastured certain animals. "In a short time we discovered the disease was making way amongst them; those that died were subjected to post-mortem examination, with the result above stated. We then cut the grass and cured it as hay, which we fed to healthy, fresh animals. They soon gave evidence of distress: became thin in flesh, had excessive heat in the head and neck, ashriveled skin over the belly, were exceedingly costive, and giving way to delirium and debility, they died in utter exhaustion and agony. We then found that dogs fed upon the meat of such animals would get the same 'trembles,' the same symptoms, the same death, the same poisoned appearance on examination." * * "Not satisfied, however, we pushed the inquiry further, and discovered that this grass, when fed alone without mixture, produced the most horrible typhus fever—a pure poisonous fever, that was milk sickness in all its hydra gangrenous condition." * * "The result to cattle becoming thus diseased gives rise to sickness in the human body. The poison tends to the glands, and the secretion of milk will necessarily be charged with it; hence, when an animal uses the milk, or eats the flesh of such diseased cattle, the result must be a similar disease in the recipient."

There are but few subjects in medicine that have occasioned more controversy than the disease under consideration, and we look upon the paper of Dr. Nagle as one of the most satisfactory that has fallen under our observation. By many, milk sickness has been considered a modification of malarious disease, and by others it has been supposed to be produced by some unknown toxic agent. Attempts have been made to specify the peculiar poison, but none, so far as we know, have based their opinions upon such careful and extended observation as has Dr. Nagle.

We quote his closing remarks in regard to treatment. "The main object is to keep up tonic, stimulant treatment, and particularly to keep the bowels open. This is the plain rule in all climates and in all localities. After the patient has convalesced, or is in such condition that he can take nutriment, *corn meal* will be found a specific against the poison. This matter I have thoroughly tested, and I can proclaim it as a certainty, that the hydrated peroxide of iron is not a more certain cure for poisoning by arsenic, than that corn-meal is an anti-periodic and specific for the terrible disease known as milk sickness or, 'trembles'. Not only in man is it a specific, but in cattle the cure is certain. Feed either party with it in plenty, give them all they can possibly eat

give it as mush and milk, as corn bread, as raw corn meal, or any other manner you can, but give corn to cure milk sickness.—*Cleaveland Medical Gaz.*, from *Amer. Med. Monthly.*

EDITORIAL.

IMPROVEMENTS IN MEDICAL COLLEGE INSTRUCTION. OPINIONS OF THE MEDICAL PRESS, ETC.

Improvements in the general system of Medical College Instruction, have constituted the subject of discussion, or of Editorial comment in many of the Medical Journals during the last few months. Some of these discussions have had reference to the next meeting of the *American Medical Association*, and the convention of delegates from the Medical Colleges to be held in New Haven, on the first Monday and Tuesday in June next; and some have had reference to the organization of the Medical Department of Lind University in this city. The plan adopted by the latter Institution has been noticed at some length, and in general terms of approval, by the *Boston Medical and Surgical Journal*, the *New York Medical Gazette*, the *Medical and Surgical Reporter*, of Philadelphia, and the *Cincinnati Lancet and Observer*.

The *New Orleans Medical News and Hospital Gazette* warmly sanctions the plan, as a move in the right direction, and compliments the Faculty for their boldness in adopting it, but expresses the fear that the change is *too great* to meet with a ready support from the profession. The *Nashville Journal*, without directly approving or disapproving, expresses the opinion that the tendency of the professional mind is decidedly towards the establishment of "one solid term of nine months," similar to the arrangement adopted by the University of Virginia. The *Peninsular and Independent* of Detroit, commends the plan as a great improvement over that of the Rush Medical College, but still not sufficient to meet the wants of the profession. Prof. A. B. Palmer, one of the Editors of that Journal, expresses the opinion that the student should be required to study four years, and attend two full college terms of nine

months each. He alludes to our having formerly proposed an annual college term of *nine* months duration, and intimates an inconsistency in having now assented to the adoption of one of only *five* months. It is true that two years since we proposed a plan of Medical College Instruction, which would make the annual College term embrace *nine* months, to be divided into a junior department of *four* months for first course students, and a senior department of *five* months for second course students. Further reflection, however, satisfied us that *four* months was too short a period for the junior course. Hence, when an opportunity presented for choosing a plan for actual adoption in practice, we preferred to increase the number of Professors, so that both departments might be carried on simultaneously, and make each full *five* months; which would be just equal to a single or consecutive term of *ten* months.

Prof. Palmer will thus see that instead of consenting to the dropping off of *four* months from our former plan for "prudential reasons," we have insisted on the actual addition of *one* month to the aggregate time of College instruction. The only serious objection that we have seen or heard urged against the plan of the Lind University, is, that although it requires the student to attend two full courses of lectures, equal in duration to the courses in any of our best Colleges, yet it requires but one course in each department. In other words, its courses are not repetitional; and it is said that one course on any given subject is not sufficient to fully impress its facts on the mind of the student. In proof of this, Prof. Palmer cites the fact that students almost always think their second course is far more profitable to them than their first. This objection as applied to the system we advocate, though plausible, is nevertheless fallacious. It is undoubtedly true, that under the prevalent system of College instruction, by which the student is required to listen to lectures on all the branches promiscuously each term, his second course is far more profitable than his first; and for a very obvious reason. Almost all students during their first year of study, properly confine their reading to Anatomy, Physiology, and Materia Medica. Hence, they come to their first course of lectures with no knowledge of the

other branches. But their minds are immediately crowded with from five to six lectures per day, embracing not only a review of those branches with which they have acquired some degree of familiarity by previous study, but also four or five others to which they are entire strangers.

The number of topics thus crowded upon their attention daily, with the desire to spend the interval between the lecture hours in the dissecting room, keeps their minds in a state of confusion, which even the best students do not recover from until the term is more than half gone. Thus they actually loose about half the value of their first course by the absence of a due preparation to understand it, and the want of time to review and reflect upon it during its progress. Hence, it is not surprising that under such a system almost every student should feel conscious of obtaining far more satisfaction from his second, than from his first course. But suppose, that instead of all this, the student coming to his first course should have his attention confined exclusively to descriptive and practical Anatomy, Inorganic Chemistry, Physiology, Materia Medica, and General Pathology; and that he should receive as many lectures on these subjects alone as is usually devoted to all the branches. Suppose further, that the term should be sufficiently extended to require only four lectures to be given daily, thereby allowing ample time to digest them, and attend to extra lessons in Practical Anatomy and the use of the microscope, would he feel any of that embarrassment and confusion which necessarily pertained to the other course? On the contrary, would he not necessarily receive and treasure up the facts and principles embraced in these particular branches far more fully and perfectly than he could by even two courses on them, given in a much shorter time, and mingled promiscuously with courses on all the other branches at the same time?

Let the reader reflect on this seriously. By the system we advocate, the junior students get 480 lectures on the five branches just named, in twenty weeks; making an average of 96 lectures for each branch, besides extra lessons with the Microscope, Dissections, and daily examinations.

While first course students in the Rush Medical College, or

any other on the old plan, get 462 lectures in sixteen weeks, on seven or eight different branches; making at most, an average of only 66 lectures on each branch.

Can any reflecting man fail to see how much more extensively and thoroughly each branch in our junior department would be presented to the class, than the same branches could be in a course on the ordinary plan?

Again, by the ordinary college course, the student attending his second term, gets a repetition of the same 462 lectures to which he listened during his first term, and in the same heterogenious order. While by our plan, the student coming to his second or senior term, having had his attention during the first term limited exclusively to a full and protracted course on the five most elementary branches, now brings to the review of the six remaining branches a mind fully prepared and disciplined for the work. His previously acquired familiarity with the elementary departments, enables him to fully appreciate every fact and principle presented in the lectures on the more practical branches; while the privilege of limiting his attention exclusively to these during his senior course greatly facilitates his progress. With these advantages, the senior student finds no difficulty during the five months embraced in our senior term, in thoroughly digesting the 480 new lectures on Surgical Anatomy, Organic Chemistry, Principles and Practice of Medicine, Principles and Practice of Surgery, Obstetrics and Diseases of Women and Children, and Medical Jurisprudence; with the addition of 160 Medical and Surgical Cliniques given at the bed-side of the sick, which together constitute our senior course. To convey a just idea of the difference between the ordinary plan of college instruction pursued in this country, and that advocated and adopted by us, we must pursue the contrast further.

In the ordinary system, the entire collegiate instruction of the student embraces but *seven* regular courses of lectures, aside from cliniques, on the same number of branches of medical science; while in the system we adopt, it embraces *eleven* regular courses, on as many different branches. It is well known that the important branches of Organic Chemistry,

Histology, Surgical Anatomy, and Medical Jurisprudence, though enumerated in many of the catalogues and annual announcements, are practically omitted from the ordinary college courses, simply because they are severally appended to other branches which absorb all the attention of the lecturer through the short term of sixteen weeks. The large number of Professorships in our system, secures to these important branches as full a consideration as to any of the rest.

With this comparison, showing so clearly the more methodical and natural arrangement of studies; the greater number of branches included in the course; the much larger number of lectures devoted to each branch; and the increased length of the terms, by which ample time is secured for Dissections, Microscopic Demo strations, and Hospital clinical attendance; we might well claim that these advantages possessed by our system, far more than counterbalance any good to be derived from a mere *repetition* of the same courses. But in addition to all these advantages, we claim that our system secures to the student a far more desirable and profitable repetition of facts and principles involved in the different departments of medicine than the ordinary system. In Anatomy, for example, by the ordinary system, the Professor commences with Osteology, and progresses through the demonstration of bones, ligaments, muscles, blood vessels, nerves, and viscera, and in 49 cases out 50, the end of the college term comes before he has completed the consideration of these. In his next course he commences at the same place, and goes over the same field again. Hence, no matter how many courses the student may attend, he is never carried beyond the elementary demonstrations in descriptive Anatomy.

By our system, however, he gets in his first course a more protracted and complete demonstration of descriptive Anatomy from the Professor in that department; and in his second, he has all the important facts of his first course brought under review, and their relations to surgery demonstrated by the Professor of Surgical Anatomy, and operations of surgery.

So with the subject of Chemistry. By the ordinary system the Professor of Chemistry begins each annual term with the

elements of Inorganic Chemistry, and in more than 49 cases out of 50, he reaches the end of the term before he has passed over more than two-thirds of the field embraced in that department of the science alone.

Prof. Blaney, of Rush Medical College, who certainly ranks among the best teachers of Chemistry in our country, generally finds himself just in the midst of a consideration of the *metals*, when the last week of the college term comes. He then, to avoid the charge of entirely omitting Organic Chemistry and Toxicology, generally devotes from two to four lectures to these important topics. The student attending his second course, simply passes over the same part of the science again. By our plan the junior student gets 60 lectures on Elementary and Inorganic Chemistry, and in his senior course he gets 60 more on Organic Chemistry, by which the facts and principles of the inorganic course are necessarily brought under review in their application to the study of organic substances. It is thus easy to perceive that while our system of Medical College Instruction does not consist in an endless repetition of courses on the same part of each branch, it does permit such a repetition of the facts and principles taught in the one department, as will bring them fully under review in the other, and show their direct application to the elucidation of the several branches taught in the senior department. And this we regard as just the kind of repetition that the student most needs.

We are confident, both from careful reflection, and from the experience of the present session, that the more our system is examined, the better its actual scope and designs are understood, the more certainly will it meet the approval of the profession. In the language of a private correspondent, "if successfully carried out, it will work a great and most decidedly favorable change in our educational system." It is so radically different from the ordinary system of Medical College organization in this country, that many of our friends who cordially approve of both its principles and details, express the fear that it is undertaking too great a change at once; and our friendly New Orleans contemporary reminds us of the old maxim "*Festina Lente.*"

In reply, we must remind our friends that there are some things that cannot be done either slowly or gradually. For instance, we cannot adopt a *principle* of action gradually. The system of Medical College Instruction which we have devised, has for its fundamental principle the division of the annual college term into two departments, with one half of the field of medical science and art assigned to one department, and the other half to the other; by which a strictly methodical system of study is secured to the student, and the aggregate extent of the field of medical college instruction greatly enlarged. No institution can adopt this principle slowly. Each college undertaking to act on the subject, must either adopt it at once by dividing the term, or reject it by adhering to the ordinary plan. Those who control the Medical Department of Lind University have chosen to adopt it, and we are confident that the profession of the North-West will both approve and sustain their choice. We are glad to see indications that the Committees of Conference appointed by the American Medical Association at its meeting in Louisville, and the Convention of Delegates from the Medical Colleges, are giving serious attention to the subject referred to them. We hope they will mature such measures as will meet the approval of both these bodies at their next meetings, and will speedily result in a great improvement of the ordinary plan of College instruction throughout the whole country.

PUBLIC ANNUAL COMMENCEMENT IN THE MEDICAL DEPARTMENT OF LIND UNIVERSITY.

The first public commencement in the Medical Department of Lind University, will be held in the Second Presbyterian Church, on the corner of Wabash Avenue and Washington Streets, on Monday Evening, March 5th. The exercises will consist of a prayer by the Chaplin, the awarding of a present to the author of the best inaugural thesis; a valedictory address on behalf of the students by one of their number; the confering of the degree of M. D. on those who have passed their examinations satisfactorily; and a valedictory address to the

graduates by the President of the Faculty, Prof. H. A. Johnson; after which an entertainment will be given to the graduates and students at the residence of Prof. N. S. Davis. The following candidates having complied with the requisitions of this department of the University, and sustained a satisfactory examination on all the branches taught in the junior and senior courses, will receive the degree of Doctor of Medicine, viz:

C. DeHaven Jones, of Evanston, Illinois.
John Conant, of Rocklord, Illinois.
J. S. Jewell, of Attila, Illinois.
Rufus Coggswell, of Illinois.
J. M. Kendall, of Wabash, Indiana.
Lucian Ashley, of Magnolia, Illinois.
Thomas J. Rigg, of Chicago, Illinois.
Horace B. Pike, of Chicago, Illinois.
J. F. Hopkins, of Milwaukee, Wisconsin.
A. D. Andrews, of River Falls, Wisconsin.

The *ad eundem* degree will also be conferred on Drs. Edward C. Dickinson, and Ezra A. Steele, both of this city.

ANNUAL MEETING OF THE ILLINOIS STATE MEDICAL SOCIETY.

The tenth annual meeting of this Society will be held in Paris, Edgar Co., on the 2nd Tuesday in *May* next. We hope the profession throughout the State will remember the time, and that a full representation from all sections will be present. The people of Paris will give them a most hospitable reception. The following preamble and resolutions offered by Dr. T. D. Washburn at the last meeting, will come up for consideration during the coming session. They have been published in the Cincinnati *Lancet and Observer*, and in the *North American Medico Chirurgical Review*, and the sentiments they contain were fully endorsed by the editors of both those Journals.

We call particular attention to these resolutions at this time, because our neighbor of the *Chicago Medical Journal* has two or three times alluded to them as proposing action disrespectful to the profession of New Haven, where the American Medical Association is to hold its next meeting, and at the same

time he has carefully abstained from publishing the resolutions so that his readers might judge for themselves. Such a course is not only contemptible in itself, but manifestly unjust to the members of our own State Society. The preamble and resolutions are as follows:

Whereas, the American Medical Association is a national Association, composed of delegates and members from all parts of the United States, meeting on terms of perfect equality:

Therefore, ***Resolved***, That in the opinion of this Society, all the officers of the Association should be selected strictly with reference to *merit*, and without any regard to their place of residence.

Resolved, That the custom of selecting the President of the Association exclusively from the Profession of the City in which the Annual Meeting is held, is not only derogatory to the *general* character of the organization, and calculated greatly to lessen the honor which should attach to that office, but past experience has shown that it leads directly to local divisions, jealousies, and injurious partisan strife.

Resolved, That the delegates from this Society to the Association, be instructed to use their influence to abrogate the custom alluded to in the preceding resolution.

Resolved, That the secretary be directed to furnish copies of the foregoing resolutions to other state and local Medical Societies, and ask their attention to the same.

ANNUAL COMMENCEMENT OF RUSH MEDICAL COLLEGE.

The Public commencement of Rush Medical College was held in the College, on the evening of the 15th of February. The lecture room was well filled by an attentive audience. The exercises consisted simply in prayer by the chaplain, the conferring of the degree of Doctor of Medicine on 34 candidates, and the reading of a valedictory address by the President of the College, Prof. D. Brainard. The address commenced with a brief allusion to the past history of the College, and then proceeded to discuss the "wants of the American Physician," and to hold up Hunter and McClellan as pre-eminently worthy of imitation by all members of our profession. The whole was, suitably *seasoned* with non-complimentary allusions to the "*pseudo-reformers* of the *present day*." The whole number attending that College, during the past session, is reported to

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be about 100, being a moderate diminution from the previous session, and a less number than has attended during any previous year since 1849.

SUMMER COURSE OF MEDICAL INSTRUCTION IN CONNECTION WITH MEDICAL DEPARTMENT OF LIND UNIVERSITY.

Immediately after the close of the regular annual course of instruction in this Institution, which occurs on the first Monday in March, a summer course of instruction will be commenced. This course will embrace instruction in Clinical Medicine in the Mercy Hospital and the Chicago City Dispensary, by Prof. N. S. Davis; in Clinical Surgery, by Prof. E. Andrews, in the same Institutions; in the more important topics connected with Midwifery and Diseases of Women, by Prof. W. H. Byford; in Analytical Chemistry, by Prof. F. Mahla; in Practical Anatomy, by Dr. H. Wardner; in Histology and Microscopy, by Prof. J. H. Hollister; on Auscultation and Percussion, by Dr. E. A. Steele; and on the Diseases of the Genito Urinary Organs, by Dr. S. C. Blake.

If Prof. Deville remains in the city, he will also give a course of instruction in Surgical Anatomy and Operative Surgery.

The instruction in all the above named departments will be FREE for the attendance of any regular student of medicine, except those of Analytical Chemistry, Practical Anatomy, and Surgical Anatomy with Operative Surgery. For each of these a moderate fee will be charged to defray the expense of material used, etc. To those who wish to pursue the study of medicine in Chicago the coming summer, this will afford every needful facility.

A QUESTION OF ETHICS.

"1. *Reductions of Dislocations of the Hip Joint by Manipulation.*

Since making the note published in our issue for October, a case of this accident has fallen under our notice, which differs

in some respects from those heretofore met with. It was that of Page, the baggage-man, injured at the accident on the Chicago and Northwestern R. R., near Watertown, Wis. The head of the bone lay in the ischiatic notch. Near three days had elapsed since the accident. Efforts at reduction had been made by a surgeon from Milwaukee, who, after applying, as we were informed, a very great mechanical power, without success, pronounced it a *fracture of the neck of the femur*, but left it without applying any dressing. The ligaments of the hip joint appeared to be entirely torn across and much contusion produced, as the member could be moved more freely than is usual in such cases.

Reduction by Reid's method was effected, but less readily than is usual. After the reduction, a slight tetanic spasm supervened, which lasted several days, but which, at our last visit, Nov. 24, three weeks after the accident, had almost entirely disappeared.

We have felt called upon in this case, contrary to uniform practice, to make a statement of facts, which may seem to reflect upon the surgeon previously called, in consequence of the attacks repeatedly made upon us in the *Milwaukee Daily News*."

We copy the above from the 12th number of the *Chicago Medical Journal*, because it contains a grave charge against one of the most upright and distinguished surgeons in the neighboring State of Wisconsin. The paragraph not only charges the "Surgeon from Milwaukee" with ignorance in having mistaken a dislocation for a fracture of the neck of the femur, and with having used undue force or violence in efforts to reduce the limb; but also in a marginal note, he is indirectly accused of having assailed Dr. Brainard through the columns of a Milwaukee daily paper. As a just and proper offset to these charges, we publish the following statement, communicated by the surgeon referred to by Dr. Brainard.

Milwaukee, Jan., 1860.

E. A. Steele, M. D.,

Dear Sir:—

I was at Watertown soon after the "Belleville Calamity." Saw Mr. Paige, and will cheerfully give you the *facts* as far as I know them. I found him with a dislocation of the left shoulder, and injury of the corresponding hip. After a reduction of the shoulder, I examined the hip; it was not an easy

matter to determine the true nature of the injury. The position of the limb corresponded very nearly to a dislocation into the ischiatic notch; but on moving it, doubt was at once thrown upon that supposition, by the ease and latitude of abduction, as well as the readiness with which moderate extension would bring the injured limb to correspond in length with the sound one. Thus far, no other surgeon, so far as I know, had examined Mr. Page. I foresaw difficulties in the case, and left it until the delegation from Milwaukee arrived, which was soon after. A more thorough examination was then instituted, resulting in more or less difference of opinion—some regarding it as a dislocation—others a fracture within the capsular ligament, or of the acetabulum. It was, however, agreed that an effort at reduction should be made, which if successful, would settle the case; if not, still might, by bringing the fractured pieces in contact, thereby producing crepitation. During the attempt to reduce, I thought, and still believe, I felt several times distinct crepitation. This, of course, settled the question in my mind that a fracture of some kind existed. A diversity of opinion still existed, and several other attempts were made to reduce; during which a number of the medical gentlemen declared they also detected crepitus.

I returned to Milwaukee the next day. Dr. Brainard saw Page the same day in the afternoon, and said he reduced the dislocation, and that in a few weeks he (Page) would be well.

I returned to Watertown the next day after. Saw Page and some of his friends; they, of course, were feeling very well, for I had told them Page would never entirely recover. On this occasion I reiterated the same opinion, but added the hope that I might some day be disappointed, by learning that he had *fully* recovered.

Through the courtesy of a medical friend (I do not take the *Journal*) I have seen this evening, for the first time, the Editor's remarks on "reduction of dislocation of the hip joint by manipulation."

He states, that he was informed, that a surgeon from Milwaukee applied great mechanical power, tearing entirely across the ligaments of the hip joint, producing much contusion, etc. He also says, "the reduction by Reid's method was effected, but less readily than is usual."

Was the ruptured state of the ligaments the cause of the unusual difficulty? Whoever informed Dr. Brainard as to the force used, at least when I was present, was either ignorant or malicious. The statement is unqualifiedly false, and can be so proved by every medical gentleman present on the occasion,

and they were quite numerous. Further, he speaks of *slight* tetanic spasms supervening after the reduction, lasting *several* days. It is well known, that for many weeks he was in a most critical condition, and at times his life even was despaired of by both friends and medical attendants.

I have never taken the *Milwaukee Daily News*, and should never have seen the "attacks" made on the Doctor had they not been shown me by others. I will send you, if I can find them, the paper that you may see how badly the Doctor was "attacked."

Very Respectfully,
Your Obt. Servant,
E. B. WOLCOTT.

We have further learned from a reliable source, that no post mortem examination was made; but that after suffering for a considerable time after the operation for reducing the dislocation of the hip, by Dr. Brainard, from tetanic muscular contractions of considerable severity, he improved slowly until he was removed to McHenry, where he was attacked with vomiting and other symptoms of gastritis, which persisted until fatal exhaustion supervened.

PROFESSIONS AGAINST PRACTICE.

In the *Chicago Medical Journal* for June last, among other misrepresentations, the editor stated that the ordinary course of instruction in the Rush Medical College embraced an aggregate of 570 lectures, while a course in the Medical department of Lind University embraced only 430; and therefore the founders of the latter had narrowed instead of extended the field of College instruction. Since then each of these institutions have actually completed their annual course of lectures. The regular lecture term in the Rush Medical College continued just fifteen weeks and two days. Six lectures per day were given except on Wednesdays and Saturdays when only three were given, the afternoon of those days being devoted to clinical purposes. This gave thirty lectures per week for fifteen weeks and twelve lectures for the two additional days,

making an aggregate for the whole term of just 462 lectures instead of the 570 previously claimed.

The annual term in the Medical department of Lind University is five months or twenty full weeks. The term consists of two departments, the Junior and Senior. The first embraces four lectures per day throughout the whole term on Anatomy, Physiology, and Histology, Materia Medica, Inorganic Chemistry, and General Pathology; making an aggregate of 480 lectures. Hence a first course student in this school hears eighteen more lectures on these five branches, than are given in the Rush Medical College on all the departments of medical science. While a student attending his second course in the latter institution hears a *repetition* of the same 462 lectures. In the University he enters the Senior department and listens to 480 more lectures on Organic Chemistry, Surgical Anatomy, Practical Medicine, Practical Surgery, Obstetrics, and Medical Jurisprudence.

The clinical advantages of the two schools during the terms just closed were as follows: In the Rush Medical College each student taking the Hospital tickets, was admitted to 3 Hospital and 1 College Clinique each week, making an aggregate of 60 Cliniques for the term. In the University School, each student taking the Hospital ticket was admitted to 6 Hospital and 2 College Cliniques per week, making an aggregate of 160 Cliniques during the term. Thus it will be seen that a student depending on Rush Medical College for education, would get 462 lectures and 60 cliniques once repeated. While in the Medical Department of Lind University, he would get 960 consecutive lectures, and 160 cliniques.

And this is what the senior editor of the *Chicago Medical Journal* called *narrowing the field of College Instruction!*

The American Medical Association will hold its thirteenth annual meeting at New Haven, on the *first Tuesday of June*, 1860. The secretaries of local societies, colleges and hospitals, are requested to forward to the undersigned, the name of delegates as soon as they are appointed.

STEPHEN G. HUBBARD, M. D., *Secretary*,
New Haven, Ct.